Volume 168 No. 13

Oil, Paint and Drug Reporter

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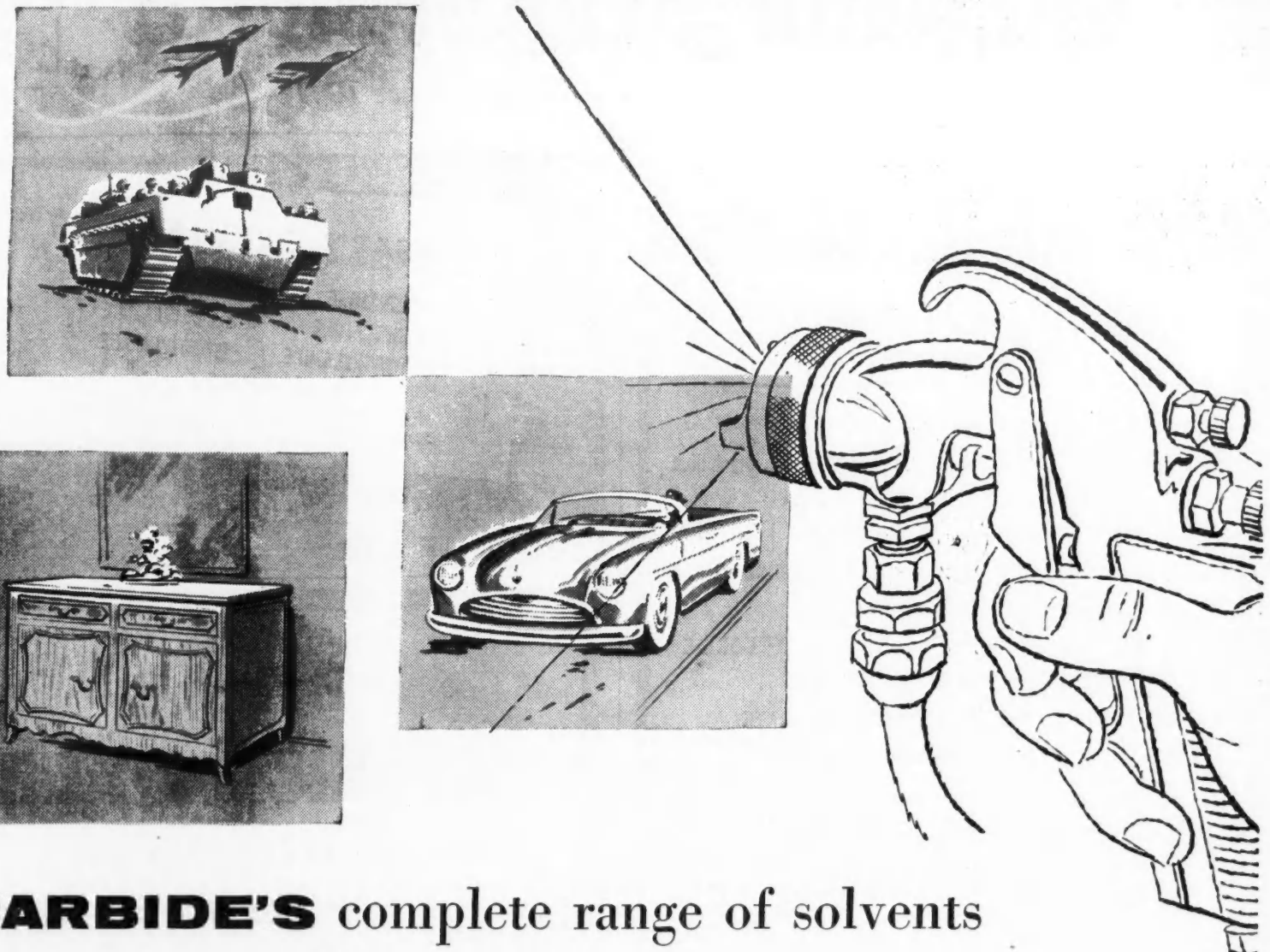

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Tung Oil Curbs May Be Allowed to Expire

A recommendation has been made to the White House by the Department of Agriculture that the voluntary agreement with Argentina and Paraguay which restricted shipments of tung oil to the United States during the current crop year be allowed to expire, it was learned last week.

There was no indication, however, of what action might be expected from the White House or when an announcement could be looked for. Since the agreement was to run only until the end of the crop year, it is presumed that an announcement will be made on the disposition of the matter before the crop year ends October 31.

Conditions When Pact Signed

The agreement was entered into last November at a time when the United States was faced with a surplus tung oil problem by reason of heavy government inventories and prospective large imports. This situation tended to depress prices and to threaten the Commodity Credit Corporation with substantial losses when it attempted to liquidate its holdings. Argentine and Paraguay agreed to limit exports to this country to approximately 25,000,000 pounds.

CCC inventories now are down to approximately 20,000,000 pounds, and, in view of the crop freeze last spring which is expected to hold domestic production of tung oil down to around 1,000,000 pounds, the department is reported to feel that there is no justification for continuing the curb on imports. Argentina is understood to have requested some weeks ago that the agreement be rescinded in view of the changed outlook from a year ago, but it was thought that since it had run this long it might just as well continue in force until its automatic termination date October 31.

A review of the tung oil situation generally, together with the government's disposal policies, was made at a meeting of officials of the Department of Agriculture last week with representatives of the producers, dealers and industrial consumers. The meeting was called by Frank Daniels.

—Continued on page 56

Fats, Oils Buying Program Planned by Peruvian Gov't

The Peruvian government plans to purchase about 11,000 short tons of fats and oils between October, 1955, and February, 1956, under the agricultural trade and development act, according to the Foreign Agricultural Service. Purchases are expected to consist of 3,300 tons of lard, 1,650 tons of soybean oil, and 6,050 tons of cottonseed oil.

FTC Moves to Bring End To Wholesale Drug Setup

The Federal Trade Commission last week moved to bring and end to an arrangement among more than 100 wholesale druggists scattered all over the country through which they are said to have received an illegal brokerage on their purchases of drugs and sundries. The druggists are the sole stockholders of Druggists' Supply Corporation, New York, which the commission claimed was violating the law.

Section 2 (c) of the Clayton act as amended by the Robinson-Patman act prohibits the direct purchaser of merchandise or an agent under his control from receiving brokerage or any other compensation for their purchases. The commission's complaint alleged that Druggists' Supply Corporation passed on to the druggists the commissions it receives from placing orders with their suppliers.

The company has been in operation for a number of years and is controlled by a five-member board of directors elected by the druggists. The FTC said that this board urges these druggists to buy from certain sellers and otherwise promotes these sellers' goods, for which it receives commissions.

As illustrative of these commissions, the complaint alleges, in a six-year period from 1949 to 1954 some 323 sellers had paid to Druggists' Supply nearly $3,000,000 based on percentages of sales made to its stockholders. During the same period, the complaint continues, seven sellers made payments of $52,000 on a lump sum basis.

A third illustration charges that one seller billed Druggists' Supply for individual orders of member buyers giving a "functional discount" of 20 percent. Drug-

—Continued on page 57

Antibiotic Rule Changes Are Announced by FDA

Several amendments to regulations relating to the certification of antibiotic products were announced last week by the Food and Drug Administration.

One of the amendments reduced by one half the amount of bacitracin which must be contained in animal feeds for the treatment or prevention of specified animal diseases and extended the exemption of animal feeds containing antibiotics from the certification requirement to those animal feeds containing this reduced amount of bacitracin.

Other amendments extended the certification period for streptomycyclidene isonicotinyl hydrazine sulfate from eighteen to thirty-six months; extended the certification period for chlortetracycline capsules from fotry-eight to sixty months, and provided for a forty-eight months expiration date for chlortetracycline tablets.

Nitrogen, Phosphates, Potash Supplies Seen Rising by 2.5 Percent in 1955-56

Supplies of the three principal plant nutrients—nitrogen, phosphates and potash—in the 1955-56 crop year will exceed the 1954-55 supply by about 2.5 percent, the Department of Agriculture stated last week in its annual fertilizer outlook report. The department's forecast for each of the nutrients was as follows:—

Nitrogen—It is currently estimated that the 1955-56 supply available for fertilizer use will be approximately 2,350,000 tons. This preliminary estimate, based on current rate of production and trends in usage and foreign trade, represents an increase of 4.4 percent over the 2,250,000 tons reported for 1954-55.

Phosphates (P_2O_5)—The 1955-56 supply of available phosphoric oxide is forecast at 2,300,000 tons, or approximately the same quantity delivered in 1954-55. This estimate is based on production, trends in consumption and foreign trade in recent years. Much larger supplies can be produced in 1955-56, provided the extra demand does not occur during the spring rush.

Potash (K_2O)—The 1955-56 supply of potash available for fertilizer in terms of potassium oxide is estimated at 1,940,000 tons. This represents an increase of approximately 4.3 percent over the 1,860,000 tons available in 1954-55. The forecast is based on trends in production, use, and foreign trade rather than the capacity of the industry to produce.

Emphasizing that the estimates are not based on capacity of the industry, but on current rates of production, trends in usage and foreign trade, the report, prepared by A. L. Mehring, fertilizer staff specialist and Charlotte Graham, administrative assistant, food and materials requirements division, noted the fact that the available supply of plant nutrients has increased each year since the 1938-39 season, and the trend continues upward.

Deliveries of nutrients to the fertilizer manufacturing industry during the 1954-55 season totaled 6,427,000 tons, as compared with 6,215,000 tons in 1953-54, or an increase of 3.4 percent.

Natural Organics, Imports Buck Trend

The expected supply of 2,350,000 tons of nitrogen represents an increase in all categories except natural organics and nitrogen imports. Natural organics as a source of nitrogen will remain at 30,000 tons, while imports of nitrogen are expected to decline from 408,000 tons in the 1954-55 year to 381,000 tons in the 1955-56 years.

From United States production it is expected to obtain 1,950,000 tons of synthetic nitrogen, 187,000 tons of by-product,

—Continued on page 43

Additives World Parley in Making To Explore Uniform Test Methods

An international conference is in the making for next year to explore the prospects of setting up world-wide testing methods for appraising the safety of chemical additives. The secretariat of the World Health Organization now has the matter under study.

So reported Dr. John N. Harvey, deputy commissioner of the Food and Drug Administraton, last week upon his return from a parley just concluded at Geneva, Switzerland, on the use of chemicals in fluids. The conclave, attended by member nations of WHO and the Food and Agriculture Organization, was an outgrowth of earlier United Nations meetings on food and nutrition.

Dr. Harvey, who was United States delegate to the Geneva conference, emphasized that no thought was given at the parley to the establishment of any international standards for controlling the use of chemical additives. Rather, he said, the meeting was held primarily in recognition of that fact that chemical additives in food present a growing problem, and that ways must be developed to meet it.

Testing Degree of Hazard

As a first step to any international accord, he indicated, it was agreed that there should be a uniform method of testing to determine the degree of hazard in the use of chemical additives. The conferees, he added, also called for the fullest exchange of additives data among the participating nations.

During the week-long session, Dr. Harvey reported, the delegates reviewed the laws, policies and testing facilities of their own countries, and showed how it might be possible to obtain the highest degree of safety in the use of chemical additives without, at the same time, endangering the nutritive values of supplies of food. It was recognized that different areas have different problems, and that a safety tolerance needed for one country would be wholly unacceptable in another.

Consideration also was given to the relative importance of different groups of additives from the standpoint of their danger to health. Dr. Harvey said that the general opinion was that they lined up in this order—colors, preservatives, anti-oxidants, homogeners and surface active agents.

The FDA official reported that he argued against classifying the additives in this manner because where matters of health are involved, it makes little difference which comes first. The other countries contended, however, that they did not have the resources of the United States to attack the problem on a broad front. Therefore, they said, they would have to limit their investigations to those areas which they believed pose the greatest threat.

No Surrender of National Sovereignty

Dr. Harvey said that throughout the meeting it was stressed that there was no intention in the minds of any of the delegates that any country should surrender any of its sovereignty. The US delegate was accompanied at the Geneva parley by Paul Johnson of the National Research Council's food protection committee, John F. Mahoney, director of research of Merck & Co., Rahway, N. J., and by Eugene Janssen of the Department of Agriculture.

Copper Loan Finalized By Export-Import Bank

Final action on a $100,000,000 loan agreement made to Southern Peru Copper Corporation last November by the Export-Import Bank was announced September 30 with the signing of the necessary documents. The money is to assist in the development of the Toquepala copper project in southern Peru, which will involve an estimated $205,000,000.

All of the capital stock of the Southern Peru Copper Corporation will be owned by American Smelting & Refining Company, Cerro de Pasco Corporation, Newmont Mining Corporation and Phelps Dodge Corporation.

The Southern Peru Copper Corporations' copper deposits are among the largest in the world. The Toquepala deposit, located about fifty-six miles inland from the Port of Ilo in southern Peru, will be operated as an open pit from which about 120,000,000 tons of overburden must be stripped before mining operations begin. Other requirements to place the project on a producing basis will include construction of a concentrator near the mine, a town for mine and mill employees, about 100 miles of railroad to the coast, a smelter and electric power generating facilities on the coast, a transmission line from the power plant to the mine and mill, port facilities, including a pier to dock oceangoing vessels, a town for smelter, power plant, and port employees, water supply systems, roads and miscellaneous facilities.

When in production, 30,000 tons of ore will be mined and sent to the mill per day. Up to about 120,000 tons of blister copper will be produced per year for a period of ten years, after which, owing to the decrease in the grade of the ore, annual production will decline gradually to about 90,000 tons. The United States government has the right to purchase a portion of the copper production upon reasonable notice.

Chemical, Allied Companies Get Certificates of Necessity

The Office of Defense Mobilization announced last week that certificates of necessity authorizing the rapid amortization of new or expanded defense facilities had been issued during the period September 8 to 21 as follows:—

Diamond Alkali Company, 40 percent allowed on an investment of $80,000 in a research and development laboratory at Cleveland, Ohio.

Uranium Reduction Company, 80 percent allowed on an investment of $10,000,000 in uranium processing facilities at Moab, Utah.

Dow Chemical Company, 40 percent allowed on $1,044,800, and 65 percent allowed on $389,623 invested in research and development facilities at Midland, Mich.

Perry Plastics, Inc., 55 percent allowed on an investment of $165,000 in ordnance facilities in Erie County, Pa.

Allegheny Ludlum Steel Corporation, 65 percent allowed on $189,000 invested in research and development facilities at Brackenridge, Pa., 75 percent allowed on an investment of $1,550,000 in titanium processing facilities at Brackenridge, 65 percent allowed on an investment of $307,000 in titanium processing facilities at Watervliet, N. Y., and 65 percent allowed on an investment of $397,000 in titanium processing facilities at Dunkirk, N. Y.

CCC Sets October Prices

The prices at which Commodity Credit Corporation holdings are available for sale to commercial buyers during October were announced October 1 by the Department of Agriculture. The agency is continuing to offer quantities of nonfat dry-milk solids, refined cottonseed oil, linseed oil, tung oil, soybeans, flaxseed, grain sorghums, gum rosin and gum turpentine.

Oil Import Curb Requested By Coal State Congressmen

Three coal state congressmen said last week that the pledge of Arthur S. Flemming, Director of Defense Mobilization, to take "positive steps" to limit residual oil imports marks "the first time in three years that the government has given any tangible indication that it wants to remove some of the unfair competitive burdens which have been foisted on the coal industry by federal policies."

The three congressmen, who went to Washington from their home districts last week to join Mr. Flemming in a conference on the residual oil imports problem, are Reps. Robert C. Byrd and Robert H. Mollohan of West Virginia, and Carl D. Perkins of Kentucky. They said that they left the Office of Defense Mobilization with the assurance that by October 15th Mr. Flemming would announce a plan to curb oil imports unless voluntary action on the part of shipping companies makes such a step unnecessary.

Parenteral Drug Ass'n Sets Up Oct. Meeting

The Parenteral Drug Association has announced a tentative program for its annual meeting, to be held October 25 through 27 at the New Yorker hotel, New York.

The following papers are scheduled for presentation:—"Changes Made in the USP XV Affecting Parenterals," by Dr. Lloyd C. Miller, director of revision of the US Pharmacopoeia; "Problems Arising From Non-Official Methods of Analysis," by Dr. Frank H. Wiley, chief of the division of pharmaceutical chemistry, Food and Drug Administration; "Parenteral Penicillin Depot Preparations," by Dr. William Elias, Wyeth Laboratories; "Pharmacological Testing of New Parenterals," by Dr. Arnold J. Lehman, chief of the division of pharmacology, Food and Drug Administration; "Physician Preference in Types of Parenteral Products," by Dr. Herbert S. Kupperman, department of therapeutics, New York University College of Medicine; "Ampul Inspection Instruments," by H. E. Pinkerton, Airborne Instruments Laboratory.

Storage of Parenterals

Also, "Stability Evaluation and Storage of New Parenterals," by George E. Alvan, Burroughs Wellcome & Co., "The Proposed Revision of the New Drug Regulations," by Arthur D. Herrick; "Parahydrobenzoates as Preservatives for Parenteral Drugs," by Miss Muriel E. Warner and Dr. A. Haldane Gee, Foster D. Snell, Inc.; "Irritative Reaction to Parenteral Injection," by Dr. Lloyd Hazelton, Hazelton Laboratories; "Cartridge Parenterals—the Modern Way," by Dr. David M. Ashkenaz, Wyeth Laboratories; "The Silicone Treatment of Vials," by Robert Goldman, Premo Pharmaceutical Laboratories.

And, "Recent Developments in European Parenteral Manufacturing," by John Henderson, Chase Equipment Company, and "Parenteral Injections in Dental Practice," "Raw Material Control," "Time-Temperature Indicators for Dry and Wet Heat Sterilization" and "Testing of Rubber Closures," by speakers to be announced.

During the program there will be the presentation of a motion picture on parenteral drug production, with the commentary by Kenneth E. Avis, of Philadelphia College of Pharmacy and Science. A round table discussion will be held on "The USP XV Sterility Tests." The speaker at the annual dinner will be Dr. Austin Smith, editor of the *Journal* of the American Medical Association. He will speak on "Trends in Drug Evaluation."

Mid-South Chemical Places Ammonia Depot in Operation

Mid-South Chemical Corporation has placed a huge, high-pressure ammonia storage terminal in operation at Harlingen, Tex. The terminal includes a battery of sixteen 30,000 gallon tanks with unloading facilities for barges operating on the Intracoastal Waterway. It is intended to serve as the distribution center for a network of smaller distributing stations the company will establish in the near future in the Lower Rio Grande Valley.

The company placed another waterway terminal in operation last spring at Memphis, Tenn. Other terminals and distribution centers are planned by Mid-South Chemical on the Gulf Coast and the Mississippi River in the upper midwest. Source of the ammonia will be a new plant to be constructed at Lake Charles, La., which will receive its raw materials from the oil refineries of Cities Service Company and Continental Oil Company at Lake Charles. These two firms recently acquired an interest in Mid-South.

Sulfuric Plant Is Projected By duPont Near Cincinnati

E. I. duPont de Nemours & Co., Wilmington, Del., will build a new sulfuric acid plant on a recently acquired site in Ohio near the confluence of the Ohio and Greater Miami Rivers, about twenty miles downstream from Cincinnati, the company has announced. Construction is to begin immediately and the plant is scheduled to start operations in the latter part of 1956.

To be known as the Fort Hill Works, the new unit will be built by the duPont engineering department and will be operated by the company's Grasselli chemicals department. It will replace the plant now operated by Grasselli at Lockland, near Cincinnati, with modern facilities. The Lockland Works will continue operations until the new plant is in commercial production.

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Petrochemical Unit Slated By Stauffer Chemical Co.

Stauffer Chemical Company, New York, has announced plans for the construction of a new multi-million dollar petrochemical plant at Louisville, Ky., for the production of carbon tetrachloride, chloroform, methylene chloride and anhydrous hydrogen chloride. The new plant will be located adjacent to Stauffer's existing plant. The latter currently produces carbon tetrachloride, perchloroethylene, anhydrous hydrogen chloride, and "Acritet" grain fumigant, a compound containing carbon tetrachloride and acrylonitrile.

The new plant, Stauffer said, will be advantageously located with respect to raw materials, receiving natural gas by pipeline to the plant and chlorine by barge at Stauffer's dock facilities on the Ohio River. Structural and process engineering are now in progress. Construction will commence early next year for completion in 1957.

Hydrogen Peroxide Output Set by Columbia-Southern

After five years in pilot plant operation, Columbia-Southern chemical Corporation has decided to go into commercial production of hydrogren peroxide by a non-electroyltic process. Funds for the project have been approved by the firm's board of directors. Engineering on a new plant is under way and construction contracts will be let this fall.

Naugatuck Facility Running At Eighty Percent Level Now

The Naugatuck, Conn., plant of the Naugatuck Chemical Division, United States Rubber Company, is now more than 80 percent back in production, six weeks after being hard hit by the flood caused by Hurricane Diane, the company revealed last week.

Completely back in operation are all of the plant's chemical and synthetic rubber production units. Still down are the reclaimed rubber production facilities, which were hardest hit by flood waters that swirled up to ten feet deep through sections of the plant. Cleanup of the reclaimed rubber machinery is being rushed, and this part of the plant is expected to be operating by October 15.

Hooker Plans Merger With Niagara Alkali Co.

Boards of directors of Hooker Electrochemical Company and Niagara Alkali Company, both of Niagara Falls, N. Y., at meetings held last week approved a formal agreement for the consolidation of the two companies subject to the approval by the stockholders of each company.

Both companies have directed the calling of special meetings of their respective stockholders on November 29, at which time the consolidation agreement will be submitted for approval. Under the terms of the proposed consolidation, Hooker will be the continuing company.

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Price Index Shows Decline

The overall OPD price index last week declined by 0.05 point to stand at 107.04.

Increases recorded October 1 sent the heavy chemicals price trend index above 100 for the first time since its inception on July 1, 1952. Scoring the most notable gains among the chemicals was a large group of closely-related alkalies, as well as some of the phosphates.

Reserpine alkaloid was reduced $2 per gram in the third price change in approximately a year's time.

Contract prices on natural and synthetic grades of phenol were advanced 1 cent per pound effective October 1 in the coaltar chemicals market. Coaltar pitch prices were also advanced on the same date. An increase of $2 per ton was announced for the grade listed in OPD.

In the oils and fats market, feature of edible grades was the rallying power of crude cottonseed and soybean oils as a result of improved export interest. This was reflected in corn, which regained a fractional decline and peanut which also was advanced for an occasional carlot. Trading for domestic needs was reported limited, chiefly for prompt needs. Crude coconut oil was easier and lower, with the decline of copra shipments.

In textile and leather chemicals, sago flour advanced, while Maine potato starch declined. Buying interest held up fairly well for the range of items in the petroleum market, and no price changes were recorded. Ethyl and methyl acrylates declined in the synthetic organic chemicals market, as did methyl chloroform and methylene chloride. Carbon tetrachloride and trichloroethylene advanced.

Prices Advanced

Acid, phosphoric, food grade, 75%, 25c. per 100
80%, 31c. per 100 lbs.
NF, 85%, 25c. per 100 lbs.
Ammonium phosphate, comm., 35c. per 100 lbs. (38).
dibasic, 35c. per 100 lbs.
Barytes, southern, water-grd., E. St. Louis, Mo., $3.40 per ton (75).
ex-whse., N. Y., $5 per ton
Calcium phosphate, dibasic, USP, 50c. per 100 lbs. (38).
monobasic, 50c. per 100 lbs.
tribasic, NF, 65c. per 100 lbs.
Carbon tetrachloride, ½c. per lb. (48).
Cardamom seed, decorticated, Guatemalan, 20c. per lb. (62).
Chlorine, liq., tanks, 12c. per 100 lbs. (38).
Cinnamon, Ceylon, No 2, 3c. per lb. (62).
"0000," 1c. per lb.
Clove, Zanzibar, 1c. per lb. (62).
Cocoa butter, 1c. per lb. (81).
Cumin, Iranian, 1½c. per lb. (62).
Ginger, Cochin, 2c. per lb. (62).
Gum, damm r, Singapore, No. 1, 1c. per lb. (75).
Lard, ¼c. per lb. (81).
Lead, white, basic silicate, ¼c. per lb. (75).
Linseed meal, $2 per ton.
Mercury, $2 per flk. (38).
Oil, castor, dom., ¾c. per lb. (81).
No. 1, Braz., ¼c. per lb.
Coconut, deod., refd., 1c. per lb. (81).
Lime, Mexican, dist., 10c. per lb. (62).
Peanut, crude, ½c. per lb. (81).
refd., ½c. per lb.
Soybean, ¼c. per. lb. (81).
Pepper, black, 3c. per lb. (62).
Red, Japanese, 2c. per lb.
Nigerian, 1c. per lb.
Phenol, 1c. per lb. (52).
1-Phenyl-3-methyl-pyrazolone-5, 10c. per lb. (55).
Pitch, coaltar, $2 per ton (52).
Sago flour, ¼c. per lb. (51).
Salt, rock, 2c. per 100 lbs. (38).
table, 2c. per 100 lbs.
Silver, 1¼c. per oz. (38).
Cyanide, 1¼c. per oz. (55).
Nitrate, ½c. per oz. (55).
Soda ash, 10c. per 100 lbs. (38).
Caustic, liq., 10c. per 100 lbs. (38).
solid, 25c. per 100 lbs.
Sal, 15c. per 100 lbs. (38).
Sodium bicarbonate, USP, 10c. per 100 lbs. (38).
powd., 10c. per 100 lbs
Carbonate, monohydrated, 10c. per 100 lbs. (38).
Chlorate, ¼c. per lb. (38).
Phosphate, monobasic, duohydrate, 15c. per 100 lbs. (38).
Pyrophosphate, acid, 50c. per 100 lbs. (38).
ferric, $3.50 per 100 lbs.
Sesquicarbonate, 15c. per 100 lbs. (38).
Trichloroethylene, ½c. per lb. (48).

Prices Reduced

Anise, Spanish, ½c. per lb. (62).
Celery seed, French, 1c. per lb. (62).
Indian, ¼c. per lb.
Copra, $7.50 per ton (81).
Coriander, Moroccan, ½c. per lb. (62).
Cottonseed meal, $2 per ton (81).
Dillseed, dewshiskered, ½c per lb. (62).
Ethyl Acrylate, 4¾c. per lb. (48).
Fennel seed, Czech, med., 1½c. per lb. (62).
Roumanian, 2½c. per lb.
Ginger, No. 2, 1c. per lb. (62).
No. 3, 1c. per lb.
Laurel leaves, Greek, 1c. per lb. (62).
Mace, Siauw, Siftings, 25c. per lb. (62).
Methyl acrylate, 4¾c. per lb.
Chloroform, ¼c. per lb. (48).
Greases, ½c. per lb. (81).
Methylene chloride, tech., 1¼c. per lb. (48).
Mustard seed, Montana, oriental, ¾c. per lb (62).
Yellow, ½c. per lb.
Oil, amyris, 5c. per lb. (62).
Citronella, Java-type, 25c. per lb. (62).
Coconut, crude, ½c. per lb. (62).
Linseed, 3/10 per lb. (81).
Oiticica, ¼c. per lb. (81).
Tung, ⅛c. to ¼c. per lb. (81).
Pimento, Jamaica, 1½c. per lb. (62).
Mexican, 2c. per lb.
Potassium stannate, 0.4c. per lb. (38).
Reserpine, $2 per gram (55).
Potato starch, Maine, 0.1c. per lb. (51).
Sodium stannate, 0.5c. per lb. (38).
Soybean meal, $1 to $2 per ton (81).
Stannic chloride, 0.6c. per lb. (38).
Stannous chloride, anhyd., 0.6c. per lb. (38).
hydrous, cryst., ¾c. per lb.
Sulfate, 0.6c. per lb.
Tallow, ⅛c. per lb. (81).
Tin, ⅞c. per lb. (38).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Oct. 7, 1955	Sept. 30, 1955	Oct. 8, 1954
107.04	107.09	106.06

AEC Relaxes Controls Over Activities Abroad

As an aid to industry and to further development and use of atomic energy abroad, the Atomic Energy Commission last week issued a general authorization for Americans to engage in unclassified foreign atomic energy activities without prior commission approval.

A notice published in the *Federal Register*, and made effective immediately, generally authorizes American atomic energy activity—when the activity does not involve classified information—in any country or area other than those in the subgroup A or so-called Communist dominated countries.

The commission soon will issue regulations calling for reports from persons who have engaged in certain activities covered by the general authorization.

Section 57a(3) of the atomic energy act of 1954 prohibits individuals and firms from engaging, directly or indirectly, in the production of special nuclear material outside the United States except (1) in accordance with an agreement for cooperation between the United States and the foreign country concerned; or (2) when the activity is authorized by the commission after a determination that it will not be inimical to the interest of the United States.

General Authorization Seen Best

As a result of experience in administering section 57a(3) (B) since adoption of the atomic energy act of 1954, the commission has concluded that the general authorization will serve the best interest of the United States. The need to obtain individual authorizations in advance is believed to have a discouraging effect upon American industry and its potential customers abroad. The authorization will assist American companies and individuals in availing themselves of foreign markets and is consistent with United States national policy of encouraging peaceful uses of atomic energy at home and abroad.

The commission's determination and authorization do not relieve any person from compliance with applicable laws, regulations and license requirements of the United States or foreign governments, including requirements under the atomic energy act of 1954, the export control act of 1949, as amended, and the mutual security act of 1954.

The commission pointed out that its general authorization does not involve a United States government commitment to fulfill demands for special nuclear and other materials which may result from United States business activity abroad.

Celanese Opens Chemical Storage Depot at Newark

The chemical division of Celanese Corporation of America, New York, last week officially opened a new chemical storage terminal at Newark, N. J., as the eastern distribution center for a broad list of liquid and dry chemicals produced by the company. Reputedly one of the nation's largest facilities of its kind operated by an individual chemical company, the modern push-button terminal has initial capacities of 4,000,000 gallons of liquid chemicals, 1,000,000 pounds of dry products and, in addition, a substantial drumming capacity.

R. W. KixMiller, vice-president and general manager of the chemical division, and host to several hundred visitors touring the terminal, said it will provide the company with an accelerated and highly efficient system for the distribution of chemicals in the rapidly expanding eastern market. Adequate storage capacity, improved pumping facilities and a remote electrical control system which is operable from several locations, he added, will bring about greater flexibility and maximum customer service.

"Celanese-produced chemicals ranging from solvents such as acetone and alco-

—*Continued on page 87*

Dow Starts Up Soda Ash Operation at Freeport, Tex.

Dow Chemical Company has begun commercial production of soda ash at its new $3,000,000 Texas division plant at Freeport, Tex. The facility has a capacity of 300 tons daily.

Donald Williams, Dow vice-president and director of sales, said the installation establishes the company's entry into a major new alkali market, complementing its long-time rank as a leading producer of caustic soda. He added that the Freeport plant uses Dow's own process, differing markedly from that which has been used for years.

Mr. Williams said that Dow's soda ash, in granular crystal form, will be shipped either in bulk or in hundred-pound bags.

Borden Vice-President

Augustine R. Marusi, president of the Borden Company's chemical division, New York, has been elected a vice-president of the parent organization. Associated with Borden's for the past sixteen years, Mr. Marusi has been chemical division president since March of last year. He started with the division's research laboratory in Bainbridge, N. Y., in 1939, served as head of its Brazilian operation, Alba, S. A., Sao Paulo, from 1947 to 1952 and in the later year was shifted to New York as a vice-president of the division.

CIL, Chipman to Organize Canadian Pesticide Company

Amalgamation of the pesticides operations of Canadian Industries (1954), Ltd., and Chipman Chemicals, Ltd., will take place within the next few months, it has been announced jointly by the two companies. Fifty percent of the shares in a joint company, to be known as Chipman, Ltd., will be held by CIL and 50 percent by Chipman.

The head office of the new company will be in Montreal. It will have four plants located at Buckingham, Que.; Hamilton, Ont.; Winnipeg, Man.; and Moose Jaw, Sask. Sales and technical services will be handled from offices located at points across the country. The operations of the new company will also include custom spraying of railroad beds and rights-of-way for destruction of weeds and brush.

The board of directors of Chipman, Ltd., will be comprised of Leonard Hynes, vice-president of Canadian Industries (1954), Ltd.; V. B. Lillie, general manager, and J. H. D. Ross, assistant general manager of CIL agricultural chemicals division, Montreal; W. H. Moyer, president, Chipman Chemical Company, Inc., Bound Brook, N.J.; J. D. Ruttan, president, Chipman Chemicals, Ltd., Winnipeg, and C. T. Ward, joint managing director of Plant Protection, Ltd., London.

Vinyl Acetate Capacity Is Increased by duPont

A $2,000,000 addition to the vinyl acetate capacity of E. I. duPont de Nemours & Co. in Niagara Falls, N. Y., has been announced by Ross Hare, manager of the company's Niagara Falls electrochemicals plant. The increase in vinyl acetate capacity will be needed to supply demand for "Elvanol" polyvinyl alcohol and "Elvacet" polyvinyl acetate emulsion.

Cosmetic Chemists to Honor Ernest Guenther of Fritzsche

The Society of Cosmetic Chemists will present its 1955 medal to Dr. Ernest Guenther, vice-president and technical director of Fritzsche Brothers, Inc., New

Dr. Ernest Guenther

York, at the organization's fall meeting, which will take place December 15 at the Commodore hotel, New York.

An internationally-known perfumer and chemist, Dr. Guenther will be the eighth to receive the award, made annually for distinguished contributions to the science and art of cosmetics. Writings of the 1955 medalist on fragrances and related subjects have been widely published.

Dr. Guenther entered the cosmetic field in 1921, and for the next three years worked as a chemist and perfumer on various European assignments. He came to the United States in 1924, and joined

—*Continued on page 64*

Newport Industries to Build Chemical Facility in Florida

Newport Industries, Inc., New York, is planning immediate construction of a chemical processing plant near Teologia, Fla. The plant will process pine stumps for the production of wood rosin, turpentine, pine oil and dipentene. It was reported that a substantial part of the output will be transported to the company's operation at Pensacola for the manufacture of refined rosin and terpene chemicals.

Shell Chemical Dedicates Allyl Chloride Installation

A multi-million dollar chemical plant, first unit in a much larger chemical manufacturing facility, was dedicated last week by Shell Chemical Corporation in Norco, La. The plant makes allyl chloride and chlorohydrins. These are used in making glycerine and "Epon" resins for paints and other surface coatings. The next unit to be built will make hydrogen peroxide. Construction on this will begin shortly, the company stated.

Sodium Chlorate Plant Set

Electric Reduction Company of Canada, Ltd., will build a $5,000,000 sodium chlorate plant in North Vancouver, British Columbia. Completion date is set for late next year or early 1957.

Pest Control Ass'n Meets Oct. 17-20

The National Pest Control Association has announced the program for its twenty-second annual convention, to be held October 17 through 20 at the Cosmopolitan hotel, Denver, Col.

The following papers are scheduled for presentation on the opening day:—

"Legal Aspects of Price Control As Related to A National Association," by Stanley L. Lind; "Competition and Pricing in A Competitive Market," by Herman L. Fellton and J. C. Redd; "Public Relations Is Your Business," by Clarence N. Walker, Coca Cola Company; "Recent Progress in Research in the Control of Cockroaches," by J. C. Keller, Department of Agriculture; "Investigations on Roach Resistance," by Lloyd L. Stitt, Velsicol Corporation; "Precise Resistance Determinations on Field Strains of German Cockroaches," by Byron Williamson, Agricultural Specialties, and "New Developments in the Control of Fleas," by J. C. Keller.

After the presentation of the papers there will be a forum on termite control problems. The topic will be "Investigation of Termites and Decay" by Building Research Advisory Board.

Papers to be read the second day will include:—"Insurance and Its Effect on the Pest Control Operator," by Jerry H. Goodman, B. & D. A. Weisburger; "What It Costs to Do Business," by John T.

—*Continued on page 64*

Reichhold, Catalin Directors Authorize Merger Discussion

Catalin Corporation of America, New York, and Reichhold Chemicals, Inc., White Plains, N. Y., jointly announced last week that the boards of directors of both companies have authorized negotiations with respect to the possible merger of Reichhold into Catalin under the name of Reichhold Catalin Chemicals, Inc., on the basis of approximately three shares of Catalin common stock for one of Reichhold's. A substantial majority of this block of stock is to be placed in a voting trust.

USDA Finds Improved Materials for Cortisone

Two complex chemicals, discovered in the tubers of a rare Mexican yam, show promise as superior raw materials for synthesis of the drug cortisone, the Department of Agriculture revealed today.

These new compounds, plant substances known as sapogenins, were found by Henry A. Walens, Samuel Serota and Monroe E. Wall, chemists of the Eastern Utilization Research Branch, Agricultural Research Service, Philadelphia, Pa.

Dr. G. E. Hilbert, director of utilization research for the department, says that the newly-discovered plant chemicals are potentially much better as starting materials for manufacture of cortisone by chemical means than any naturally occurring substance so far known.

Names of New Chemicals

The scientists who isolated these compounds named them gentrogenin and correllogenin, after two plant explorers of USDA's horticultural crops research branch, Drs. H. S. Gentry and D. S. Correll. Mexican yams containing the chemicals were found by Drs. Gentry and Correll during plant-hunting expeditions to a remote area of southern Mexico.

They shipped samples to the Philadelphia laboratory for analysis and also sent specimens to the department's plant-introduction garden at Gleen Dale, Md., for propagation. Field tests of these plants will be made next spring, to find out whether they can be cultivated as an economical source of raw materials for cortisone manufacture.

Gentrogenin and correllogenin are described by the chemists at Philadelphia as isomeric steroids. The chemical name of gentrogenin is 5-20-a-22a-25-D spirostene-3-beta-ol-12-one. Correllogenin, which has a closely similar structure, is designated as 5-20-a-22a-25-L-spirostene-3-beta-ol-12-one.

The Mexican yams containing these new steroids are a species known as *Dioscorea spiculiflora*. Plant sources of steroids now used in cortisone synthesis include previously discovered *Dioscorea* species, particularly *D. composita*.

Present Sources of Cortisone

Cortisone and related drugs, which have hormone-like action in the human body, are widely used in medicine, especially for treatment of arthritis. Materials now used to make cortisone commercially come mainly from animal sources (chiefly ox bile), but also include the steroids diosgenin from Mexican yams and hecogenin from the sisal-fiber plant.

The unusual value of the new Mexican-yam steroids is due to the presence in each of them of two desirable chemical structures—particular combinations of oxygen, hydrogen, and carbon atoms—that ordinarily occur only singly in nature. The

—*Continued on page 79*

Ansul Entering Niacin, Sodium Bisulfate Fields

A three-point capital expansion program has been announced by Ansul Chemical Company, Marinette, Wis., consisting of an addition to the company's mechanical manufacturing facilities in the fire equipment division, and new chemical plant buildings for the manufacture of sodium bisulfate and niacin.

Ansul expects to begin producing sodium bisulfate for sale next year. The manufacturing plant is 90 percent complete and test runs have already been made. Raw materials for the manufacturing process will be supplied by residual products from another manufacturing operation.

Construction of a combination manufacturing plant and warehouse for the production of niacin should be completed about mid-November, according to company spokesmen. Target date for the manufacture of niacin has been set at January 1, 1956.

Monsanto to Boost Ethylene Production for Internal Use

Plans for a multi-million dollar expansion of ethylene production facilities at Monsanto Chemical Company's plant in Texas City, Tex., have been announced by the firm's plastics division.

Ethylene production capacity will be increased by 150 percent. Construction is expected to get under way next March. The new facilities should be operating by the first quarter of 1957.

Monsanto's Texas City plant uses ethylene, styrene monomer and vinyl chloride monomer. The company has earmarked its entire ethylene production for internal use.

Introducing

3 NEW ALKATERGES

compare these
new versatile

SURFACE-ACTIVE AGENTS

Compare the physical properties of these new additions to the CSC family.

Physical Properties	Alkaterge C	Alkaterge A	Alkaterge E	Alkaterge T
Color, Gardner (1933)	15	7	7	7
Solidification Point, °C	−40	−41	−50	59
Specific Gravity @ 20/20°C	—	0.885	0.926	—
Specific Gravity @ 25/25°C	0.925	0.883	0.924	—
Wt. per US Gallon @ 68°F, lbs.	7.71	7.37	7.72	—
Coefficient of Expansion, per 1°F	0.00067	0.00061	0.0043	—
Refractive Index, n_D @ 25°C	—	1.4631	1.4738	—
Viscosity:				
Saybolt Universal @ 100°F. sec.	—	79.9	299	—
Centistokes @ 100°F	71*	14.5	62	—
Interfacial Tension Against Water, dynes/cm:				
0.1% solution in mineral oil	2	24.6	18.1	1.8
1% in m.o. against sat. ag. sol'n	—	10.5	3.7	—
Surface Tension, sat. ag. sol'n. dynes/cm:	42	37.6	37.8	30.4
Flash Point, Cleveland Open Cup, °F	400	325	395	None
Solubility, ml/100 ml:				
In Water	0.005	0.005	0.4	0.01
Water in product	—	3.8	2.56	—

*at 96°F

Now, Commercial Solvents offers three new surface-active agents that are closely related to ALKATERGE-C. Because of the latter's proven industrial usefulness, demand exceeds supply. Production facilities are being expanded. Many of CSC's customers have found that ALKATERGE-A,-E, or-T do equally well or better in many of the jobs formerly accomplished by ALKATERGE-C. While they differ somewhat in individual properties, they should prove useful as auxiliary emulsification agents, antifoam agents, dispersing agents, spreading agents, pigment-grinding assistants, acid acceptors and in numerous other applications. Test all or any of these three new alkaterges for yourself. For complete information and a sample, write to Market Development Department, CSC, 260 Madison Ave., N.Y.16, N.Y.

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CSC
INDUSTRIAL CHEMICALS

Association Meetings

This Week

American Mining Congress, 1955 mining convention, Las Vegas, Nev., October 10-13.

American Oil Chemists' Society, annual fall meeting, Bellevue-Stratford hotel, Philadelphia, October 10-12.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 12-13.

Association of American Fertilizer Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 14.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 10-12.

Combined Pharmaceutical Contact Committee of ADMA and APMA, Sheraton-Park hotel, Washington, D. C., October 10-11.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Commodore hotel, New York, October 11

American Coke and Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 17-18.

American Council of Independent Laboratories, annual meeting, Westward Ho hotel, Phoenix, Ariz., November 8-11

American Institute of Chemical Engineers, annual meeting, Statler hotel, Detroit, Mich., November 27-30

American Petroleum Institute, annual meeting, St. Francis, Fairmount, Palace and Mark Hopkins hotels, San Francisco, November 14-17.

American Pharmaceutical Association, New York branch, Remington medal presentation dinner, Sheraton Astor hotel, New York, December 5.

American Pharmaceutical Manufacturers Association, mid-year and eastern section meetings, Waldorf-Astoria hotel, New York, December 12-14.

Antibiotics in Agriculture Conference, first annual, Washington, D. C., October 19-21.

Antibiotics Symposium, third annual, Department of Health, Education and Welfare auditorium, Washington, D. C., November 2-4.

Armed Forces Chemical Association, annual dinner meeting, Delmonico hotel, New York, Nov. 3.

Association of Consulting Chemists and Chemical Engineers, forum and annual meeting, Belmont Plaza hotel, New York, October 25.

Association of Economic Poison Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 17.

Atomic Energy Exposition, United Nations Plaza, New York, October 20-November 3.

Boston Conference on Distribution, Statler hotel, Boston, October 17-18.

Chemical Industries Exposition, Commercial Museum and Convention Hall, Philadelphia, December 5-9.

Chemical Market Research Association, joint meeting with CCDA, Carter hotel, Cleveland, Ohio, November 14-15.

Chemical Specialties Manufacturers' Association, annual meeting, Roosevelt hotel, New York, December 5-7.

Commercial Chemical Development Association, joint meeting with CMRA, Carter hotel, Cleveland, Ohio, November 14-15.

Industrial Council, fifth annual meeting, Rensselaer Polytechnic Institute, Troy, N. Y., October 27-29.

Industrial Hygiene Foundation, annual meeting, Mellon Institute, Pittsburgh, Pa., November 16-17.

International Atomic Exposition, Cleveland Public Auditorium, Cleveland, Ohio, December 12-16.

International Congress of Industrial Chemistry, Madrid, Spain, October 22-31.

Manufacturing Chemists' Association, semi-annual meeting, winter conference, Statler hotel, New York, November 22.

National Association of Retail Druggists, annual convention, Atlantic City, N. J., October 16-20.

National Conference on Standards, Sheraton-Park hotel, Washington, D. C., October 24-26.

National Foreign Trade Council, annual foreign trade convention, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish and Lacquer Association, annual convention, Shoreham and Sheraton-Park hotels, Washington, D. C., October 31-November 2.

National Pest Control Association, annual convention, Cosmopolitan hotel, Denver, Col., October 17-20.

National Wholesale Druggists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., November 5-9.

Nuclear Engineering and Science Congress, Cleveland Public Auditorium, Cleveland, Ohio, December 12-16.

Oil Trades Association of New York, annual banquet, Waldorf-Astoria hotel, New York, November 1.

Packaging Institute, annual forum, Statler hotel, New York, October 31-November 2.

Parenteral Drug Association, annual meeting, New Yorker hotel, New York, October 25-27.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, October 24.

Society of Chemical Industry, American section, chemical industry medal dinner, Waldorf-Astoria hotel, New York, October 28.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Commodore hotel, New York, November 9; annual dinner, Commodore hotel, December 1.

World Symposium on Applied Solar Energy, University of Arizona, Tucson, Ariz., October 31-November 1; Phoenix Civic Center, Phoenix, Ariz., November 1-4.

Oils, Fats Output, Use: August

Statistics on production and consumption of oils, and fats, including raw materials and primary products have been compiled by the Bureau of Census, Department of Commerce, for the month of August. The data are as follows:—

Primary Products

	Production	Consumption	Stocks Aug. 31
	Pounds		
Babassu oil, crude	....	.....	2,217,000
Refined	[1]	[1]	94,000
Castor oil, No. 1, crude and No. 3, crude	2,425,000	9,177,000	[2]39,157,000
Coconut oil, crude	39,835,000	54,334,000	[2]85,529,000
Refined	38,211,000	33,135,000	13,242,000
Cod and codliver oil[3]	90,000	N.A.	572,000
Corn oil, crude	23,872,000	24,589,000	13,593,000
Refined	22,540,000	19,366,000	6,165,000
Cottonseed oil, crude	70,391,000	61,754,000	50,935,000
Refined	57,996,000	105,137,000	[4]287,292,000
Menhaden[5]	20,427,000		
Sardine (pilchard) and herring[5]	55,000	6,165,000	57,090,000
Other fish oil, except liver oil[5]	477,000		
Lard, rendered and refined	[6]172,000,000	[6]39,232,000	97,014,000
Linseed oil, raw	59,553,000	46,629,000	63,138,000
Refined	19,993,000	22,309,000	25,811,000
Marine mammal oil, not specified[3]	.....	3,488,000	[2]10,892,000
Oiticica oil	.....	737,000	6,507,000
Olive oil, edible	.....	251,000	5,757,000
inedible	.....	[1]	36,000
Sulfur foots	.....	[1]	[1] .....
Palm oil, crude	.....	5,462,000	[2]19,822,000
Refined	[1]	2,102,000	1,880,000
Palm kernel oil, crude	.....	2,741,000	10,299,000
Refined	2,078,000	2,646,000	1,765,000
Peanut oil, crude[7]	713,000	3,259,000	6,890,000
Refined	2,963,000	2,436,000	6,338,000
Perilla oil	.....	[1]	[1] .....
Rapeseed oil, crude	.....	[1]	[1] .....
Refined	.....	287,000	2,125,000
Sesame oil, crude	.....	[1]	[1] .....
Refined	.....	175,000	722,000
Soybean oil, crude	219,494,000	230,366,000	113,578,000
Refined	213,451,000	190,072,000	78,623,000
Tallow, edible (incl. refined)	20,094,000	[8]15,222,000	14,299,000
Tallow and grease, inedible (other than wool)	.....	[1]	[1] .....
All establishments	216,060,000	128,853,000	251,071,000
Establishments classified in meat packing industry	78,964,000	N. A.	N. A.
Tallow and grease, inedible, refined	17,317,000	16,997,000	8,204,000
Tung oil	.....	4,259,000	33,863,000
Other vegetable oil, not specified, crude	4,515,000	3,048,000	20,490,000
Refined	3,529,000	2,255,000	5,196,000
Vegetable foots, 100% basis	16,787,000	14,191,000	40,706,000

Primary Products Except Oil

	Production	Tons—and transfer Shipments	Stocks Aug. 31
Cottonseed cake and meal	103,409	136,796	169,703
hulls	47,922	43,826	45,759
linters[9]			
First cut	12,900	28,361	30,376
Second cut	46,092	83,212	39,699
Mill run	7,842	8,121	7,148
Total	66,834	119,694	77,223
hull fiber	241	320	234
motes and grabbots	583	807	1,233
Soybean cake and meal	458,557	487,593	69,232
flour	10,134	10,407	2,[illegible]
Other cake and meal—			
Castor bean	1,447	1,070	477
Copra	10,774	10,680	5,739
Corn germ	12,982	12,797	4,290
Flaxseed	46,759	48,281	26,224
Olive	.....	[10]	[1] .....
Peanut[7]	925	1,293	1,200
Tung nut	.....	[1]	[1] .....
Other	4,264	5,871	1,671

Secondary Products

	Production	Consumption	Stocks Aug. 31
	Pounds		
Castor oil, chemically dehydrated[11]	1,463,000	N. A.	2,216,000
Deodorized oil[12]	45,420,000	13,722,000	10,841,000
Coconut-type fatty acids, including coconut, babassu, and palm kernel; and such fractionated fatty acids as lauric, caprylic, capric, and myristic[13]	3,586,000	N. A.	5,514,000
Fish and marine mammal fatty acids	1,899,000	N. A.	619,000
Low rosin fatty acids (rosin 20% or less)	4,340,000	N. A.	1,255,000
Oleic acid, including white oleic and red oil	8,818,000	N. A.	9,085,000
Stearic acid (40-50% stearic content)	5,927,000	N. A.	4,992,000
Other stearic acids (over 50% stearic content), high palmitic (over 60% palmitic), hydrogenated animal and vegetable fatty acids	7,679,000	N. A.	5,820,000
Unsaturated unhydrogenated animal fatty acids (other than oleic)	7,404,000	N. A.	13,546,000
Unsaturated unhydrogenated vegetable fatty acids	7,948,000	N. A.	8,293,000
Glycerine, crude (100% basis)[14]	20,290,000	22,364,000	12,742,000
refined, all grades (100% basis)[15]	22,102,000	16,510,000	23,146,000
Grease oil, lard oil, and tallow oil[11]	4,157,000	N. A.	4,701,000
Hydrogenated animal fats and oils—			
Edible	3,401,000	1,690,000	1,091,000
Inedible	2,442,000	3,012,000	3,346,000
Hydrogenated vegetable oils—			
Edible—			
Cottonseed	33,139,000	32,357,000	17,962,000
Soybean	79,871,000	76,427,000	32,761,000
Other	6,261,000	3,736,000	2,691,000
Inedible	968,000	1,643,000	1,379,000
Margarine[14]	[16]91,592,000	N. A.	20,632,000
Oleo oil and stearine, animal, edible	7,578,000	2,314,000	3,525,000
Shortening[11]	151,447,000	N. A.	149,813,000
Stearine, animal, inedible[11]	1,036,000	N. A.	788,000
Vegetable oil, winter	14,602,000	13,786,000	20,259,000
Tall oil, crude	46,215,000	31,660,000	52,016,000
Refined (excluding low rosin fatty acids)	9,676,000	6,679,000	12,949,000
Winterized oil	55,880,000	36,543,000	30,185,000

Raw Materials at Mills

	Receipts	Tons—Crushings	Stocks Aug. 31
Castor beans	1,271	2,686	4,350
Copra	26,608	31,203	17,697
Corn germ	27,310	27,991	906
Cottonseed	348,692	212,310	345,446
Flaxseed	108,141	73,789	84,940
Olives	.....	[10]	[1] .....
Peanut[17]	978	1,146	533
Soybeans	496,548	396,739	216,023
Tung nuts	.....	[1]	[1] .....
Other	9,250	7,528	2,313

N. A.—Not available.

[1] Included in "Other vegetable oils" to avoid disclosure of figures for individual companies.

[2] Data for stocks of crude palm oil, crude coconut oil, crude castor oil, and sperm oil are on a commercial stocks basis and do not include figures for stock piles of strategic oils.

[3] Data for fish oil producers collected by Fish and Wildlife Service, Department of the Interior. Combined totals only are available for consumption and stocks of fish oil and marine mammal oil. Consumption data for cod, cod-liver, and other liver oils unavailable and stock figures for these items represent quantities held by producing firms only.

[4] Includes 168,000,000 pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corporation. This figure, as well as the comparable July 31, 1955, figure of 187,000,000 pounds, include quantities sold for export by CCC but not "lifted" but exclude quantities sold by CCC for export and being further refined. As of August 31, CCC reported that it had removed from inventory and put in an "in-transit position to other storage" about 39,000,000 pounds of refined cottonseed oil, all of which has been accounted for in respondents reports to the Census Bureau.

[5] Data on production collected by Department of Agriculture. These figures represent only rendered lard. According to this agency, refined lard production (federally inspected only) totaled 128,000,000 pounds in August.

[6] Excludes quantities used in refining.

[7] Data on production and stocks held at crude oil mill locations collected by Agricultural Marketing Service, Department of Agriculture.

[8] Average gross bale weight in pounds for August production:—Total 608.3; first cut, 614.4; second cut, 619.6; and mill run 531.6.

[9] Data collected by Agricultural Marketing Service, Department of Agriculture.

[10] Included in "Other" to avoid disclosure of figures for individual companies.

[11] Data for stocks exclude quantities held by consuming factories.

[12] Winterized-deodorized oil, hydrogenated-deodorized oil, and cooking and salad oil not included.

[13] Includes data for synthetic glycerine.

[14] The total for August, 1955, was packaged as follows:—One-pound units, 84,396,000 pounds; bulk pats or chips 1,506,000 and bulk other 5,771,000 pounds. The sum of these items may not agree with the production total shown above because some margarine is not packaged during the same month in which it is produced.

[15] Data on peanuts collected by Agricultural Marketing Service, Department of Agriculture, and include reports by peanut shellers.

TAAPI Plastics Parley Is Planned Nov. 14-15

The Technical Association of the Pulp and Paper Industry has announced plans for a national plastics meeting to be held November 14 and 15 at the Brooklyn Law School, Brooklyn, N. Y. The first session will be devoted to the theme "Fibrous Materials for Laminates," under the chairmanship of P. M. Goodloe of Brown Company.

Speaking at this session will be Hans Arledter of Hurlbut Paper Company, who will present "Some Factors Influencing the Crazing Tendency of Laminates." He will be followed by F. Carlton Loeber of Forming Machine Company and Frank Hayes, of Noble & Wood, Inc., who will present "The Forming Machine — Its Use in Sheet and Pre-Forming Operations." "Kraft and Synthetic Fiber Pulp Mats for Laminates," will be given by L. P. Wenzell of Celanese Corporation.

Paper-Laminate Properties

The first session will continue with George Shaw of Taylor Fiber Company talking on "A Preliminary Investigation of Paper-Laminate Property Relationships." Myer Ezrin of Monsanto Chemical Company will present "Factors Affecting the Electrical Properties and Fire Resistance of Phenolic Paper Laminates." A panel discussion on "Testing Paper for Resins Saturating Qualities" will conclude this session.

The second session will cover the theme "Resins Employed in Laminates," under the chairmanship of H. F. Mark of the Polytechnic Institute of Brooklyn. "Board Surfacing Resin" will be offered by R. Lindentelser and H. P. Ledden of American Cyanamid Company. H. C. Brill of E. I. duPont de Nemours & Co. will talk on "Titanium Organic Polymers and Their Use with Fibers."

"Polyesters" will be covered by H. L. Gerhart of Pittsburgh Plate Glass Company. P. A. Thomas, J. L. Welch, jr., and B. E. Godard of the Bakelite division of Union Carbide & Carbon Corporation will discuss "Epoxy Resins and Their Use with Fibers."

Paper Industry's Paper Needs

The third session, on November 15, will cover the theme "The Pulp and Paper Industry Speaks on its Plastic Requirements," with W. Stickel of Texon, Inc., as chairman. J. F. Helms of Marathon Corporation will discuss "Specialty Papers." "Glassine" will be presented by Ralph Nazzaro of Westfield River Paper Company. A. T. Luey of The Boxboard Association will talk on "Boxboard," while

—*Continued on page 79*

Consulting Chemists to Weigh Marketing of Their Services

A symposium "How to Buy and Sell Consulting Services" will be held October 25 on the occasion of the annual meeting of the Association of Consulting Chemists and Chemical Engineers. The business meeting and symposium, which will follow a cocktail hour and banquet, will be held in the Baroque Room of the Belmont Plaza hotel, New York. The cocktail party will get under way at 5 p.m.

Guest speaker at the symposium will be Savery F. Coneybear, director of research for Colgate-Palmolive Company, Jersey City, N. J. Moderator of the discussion will be Richard L. Moore, director of public relations for Foster D. Snell, Inc., New York.

Tickets will be priced at $10 per person, with ladies welcome. Letterhead reservations with remittance must be received not later than October 21, addressed to the association, room 82, 50 East 41st street, New York 17. The meeting is informal.

SOCMA Will Meet Tuesday For Talk by General Creasy

The Synthetic Organic Chemical Manufacturers Association will hold its next luncheon meeting October 11 in the west ballroom of the Commodore hotel, New York. Speaker will be Maj. Gen. William M. Creasy, chief chemical officer of the army. His topic will be "The Need for a Healthy Industry." Cocktails will be served at noon and luncheon will follow a half hour later.

MCA Conference Date Set

The fifth semi-annual meeting and winter conference of the Manufacturing Chemists' Association will be held at the Statler hotel, New York, on November 22. The meeting will feature six panel discussions on management topics of special interest to chemical industry executives.

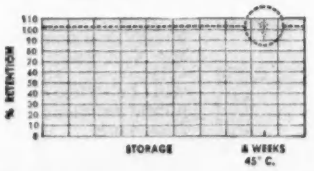
Why you should use 'ROCHE' { RIBOFLAVIN (vitamin B_2) / RIBOFLAVIN-5'-PHOSPHATE SODIUM

'ROCHE' VITAMIN B_2

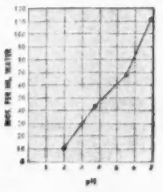
With the varied requirements for vitamin products in mind, Roche has developed three types of riboflavin to meet your formulating needs. As with all Roche vitamins, there are good reasons why you should specify riboflavin *'Roche'*. These again prove the wisdom of our statement: "It pays to stay with the leader."

A. THREE TYPES. Roche makes three types of riboflavin, each of which has special advantages for pharmaceutical manufacturers.

- **RIBOFLAVIN 'ROCHE'—REGULAR.** Especially useful for powdered dietary supplements, pharmaceutical tablets, soft gelatin capsules and dry enrichment premixes.
- **RIBOFLAVIN 'ROCHE'—SOLUTIONS TYPE.** For use in parenteral solutions which approach or slightly exceed the maximum solubility of B_2. Less likely to crystallize out.
- **RIBOFLAVIN-5'-PHOSPHATE SODIUM 'ROCHE'.** An original Roche development. Preferred for all solutions because it is rapidly and highly soluble. Better taste . . . no bitter after taste. Eliminates need for solubilizers. Specially valuable for highly concentrated oral and parenteral multivitamin solutions (with or without ascorbic acid), elixirs, syrups, water dispersible multivitamin formulations in capsules, tables, lozenges. Theoretical B_2 content: 73%. Roche product: 70-73%.



STABILITY in B-complex parenteral solutions with or without vitamin C.



SOLUBILITY in water at different pH levels; room temperature.

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F. PACKAGING. Packed in polyethylene bags in ½ and 1 kilo tamperpruf metal containers and in fibre drums up to 20 kilos. Small quantities in amber s.c. glass bottles.

G. LEADERSHIP. Because of its position as a world-leader in research and production of vitamins you can rely on Roche.

H. NEED SAMPLES? Ask your Roche salesman or write the Vitamin Division for samples and technical literature.

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Current Market Quotations

Chemicals and Related Materials

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Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, October 7 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms. works lb. .40 - —
above 92.5 C. m.p. bbls., dms., works lb. .41 - .50
Acetaldehyde 99%, dms. c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½- —
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., bbls. c.l., dlvd lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½- —
USP bbls. 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 .86
Acetic anhydride, dms. c.l. dlvd E. lb. .15½- —
l.c.l. dlvd E lb. .17 - —
tanks, dlvd E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .09 - —
l.c.l., dlvd. lb. .10 - —
tanks, dlvd. lb. .07 - —
Methyl (see MP
Acetonitrile, dms. c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt equald lb. 1.17 1.19
Acetophenone, cns. dms lb 1.21 1.85
tech., dms., l.c.l., works lb. 75 —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb 1.75 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E of Denver. lb. .40 - —
tanks, frt. alld. E. of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, comt., dms., c.l., works lb. .12 —
l.c.l., ex whse lb. .1490- —
cryst dms, c.l works lb. .06½- —
l.c.l., works lb. .07 - .07½
Acetic, coml. or redist., 28⅝, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs.10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs.15.00 -16.00
tech dms. c.l., dlvd 100 lbs.12.00 - —
l.c.l., dlvd 100 lbs.13.00 - —
tanks, dlvd 100 lbs.10.00 - —
USP chys., inclusive, dlvd., 100 lbs.24.00 -25.00
Acetic anhydride (see Acetic anhydride above)
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh) bbls. 1,000-lb. lots. lb. .58 .60

Freight equald, shipt, identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Adipic, bgs., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37¾- —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 1.77
USP dms., 1,000-lb. lots or more, works lb 2.50 —
smaller lots, works lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 —
smaller lots, same basis lb 4.05 4.50
Anthranilic, bbls. frt equald lb 1.21 —
Arsenous, tech., (see Arsenic, white).
USP (see Arsenic trioxide)
Ascorbic USP, dms., 25-100 kilo lots kilo.16.00 - —
10-kilo lots kilo.16.35 - —
5-kilo lots kilo.16.75 - —
bots 1-kilo lots kilo.17.00 - —
500-gram lots kilo.17.50 - —
Battery, chys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi ton.176.50 - —
smaller lots, same basis. ton.181.50 - —
dms., c.l., works ton.151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton.201.00 -222.00
smaller lots, same basis. ton.206.00 -227.00
gran., bgs., c.l., works ton.101.75 - —
ton lots, ex whse, N. Y. or Chi ton.151.50 - —
smaller lots, same basis. ton.156.50 - —
dms., c.l., works ton.126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton.176.00 -197.00
Acid, boric, tech., 99.9%, gran., bbls., smaller lots, same basis. ton.181.00 -202.00
bulk, c.l., works ton.95.75 - —
powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse, N. Y. or Chi ton.156.50 - —
smaller lots, same basis. ton.161.50 - —
dms., c.l., works ton.131.25 -152.25
ton lots, ex whse., N. Y. or Chi ton.181.00 -202.00
smaller lots, same basis. ton.186.00 -207.00
Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.
Broenners bbls lb. 1.76 - —
Butyric, 99% dms., c.l., works, lb. .34 - —
l.c.l., works lb. .34½- —
tanks, works lb. .32½ —
Capric, dms lb. .24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 1.75
Castor oil, split, dms lb. .35½- .36
Chicago, bbls. frt alld lb. 3.21 - —
Chloroacetic, mono- purif., flake, 99%, dms lb. .23½- .25½
tech., flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib. dms., works lb. 1.13 - —
p-Chlorobenzoic, fib dms. works lb. 1.59 1.62
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l. frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Cholic, 100-lb. lots, fib. dms. lb. 6.00 6.25
Chromic 99¾%, dms. c.l. works frt. equald lb. .28½- —
l.c.l., dlvd., N. Y. metropolitan area lb. .29 - .30
NF (see Chromium trioxide).
Cinnamic, refd. bots lb 2.50 3.50
Citric, USP, anhyd., gran., fine gran dms. c.l. lb. .28¾- —
10,000-lb lots, 1 shipt. lb. .29¼- —
smaller lots lb. .29¾- .31¼
Acid, citric, USP, hydrous, gran., fine gran., dms., c.l lb. .27 - —
10,000-lb lots, 1 shipt. lb .27½- —
smaller lots lb. .28 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 —
Coconut oil, dist., dms lb. .24¾- .26¾
tanks lb. .22¾- —
dbl dist., dms lb. .25¾- .27¾
tanks lb. .23¾- —
Corn oil, dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —
Cottonseed oil, dist., dms lb. .1525- .1725
tanks lb. .1325- —
2,3-Cresotic, dms. ton lots, works. lb. .70 - —
less than ton lots, works lb. .72 - —
Cresylic, coaltar dom. 50% 207° C or above, resin and tricresyl phosphate grade, tanks, frt. equald gal. 1.00 - —
50% 210° C. or above, total range over 9° C., non-resin grade, dms., c.l., same basis gal. .91 - —
l.c.l., same basis gal. .94 - —
tanks, same basis gal. .80 - —
50% 204° to 207° C., tricresyl phosphate and resin grade, tanks, same basis gal. 1.10 - —
Imp., 75% at 215° C., or over, dms., ex whse gal. .85 - 1.00
petroleum, dom., 195° to 214°C., non-ret. 65 dms. to c.l., works, San Francisco and Los Angeles gal. .75 - —
l.c.l., same basis gal. .77 - .79
tanks, works, frt. alld E. gal. .71 - —
200° C. to 222° C., tanks, Wilmington, Cal gal. .62 .69
211° C to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .67 - —
l.c.l., same basis gal. .69 - .71
tanks, same basis gal. .54 - —
220° C. to 242° C., tanks, Wilmington, Cal gal. .54 .59
245° C. to 298° C., tanks, Wilmington, Cal gal. .50 —
Crotonic, fib. dms., 200 lbs or more, works lb. .50 - —
Cyanoacetic, tech., bbls lb. .90 - 1.25
Dehydrocholic, injection, fib dms 100-lb. lots lb.12.25 - —
oral, fib. dms., 100-lb. lots lb. 9.25 - —
Acid, desoxycholic, fib dms., 100-lb. lots lb.14.00 - —
Dichlorophenoxyacetic (see under D 2,4 D)
Diethylbarbituric (see Barbital)
Diglycolic, bgs. works lb 14 —
2-ethyl hexoic, dms., c.l., works lb. .36½- —
l.c.l., works lb. .37½- —
tanks works lb. .34½- —
F, crude, paste, bbls. works lb. 2.10 - —
Folic, bots fib. cns kilo-lots or more gram. 1.40 - —
Formic, 85% chys., c.l., works lb. .1370- —
l.c.l., works lb. .1620- .1720
90% chys. c.l. works lb. .1625- —
l.c.l. works lb. .1675- .1775
Fumaric, tech., bgs., dms lb. .27 .28
Gallic, NF VII, bbls. 1,000-lb lots lb 1.80 —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb lots lb 1.58 —
smaller lots lb. 1.82 - 2.00
Gamma, dry, grd. bbls., frt. alld. lb. 1.50 - —
paste bbls frt alld lb 1.45 - —
Gentisic, 100-lb fib dms lb 8.50 - —
Gluconic, tech., 50% bots lb. .25 - .35
cbys lb. .19 - —
dms. lb. 15½- —
l-Glutamic, 99½% fib. dms., 100-lb lots works lb 2.45 2.53
25-lb lots, works lb 2.54 2.60
Glycerophosphoric, 35%, dms., works lb. 2.25 2.35
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb 3.23 - —
Hydrobromic, medicinal, 48%, cbys dlvd E Ly lb .37 - .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs 2.50 - —
l.c.l. dlvd Metropolitan area 100 lbs 2.90 3.05
tanks, works, frt equald ton 28.00 - —
20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l. dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt equald ton 30.00 - —
22° cbys., c.l., works 100 lbs. 3.25 - —
l.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt equald ton 35.00 - —
CP, USP consumers, cbys., extra, c.l. works lb. 11¾- —
c.l., same basis lb. .13¼- .13¾
5-pint bots., extra, cs., c.l., same basis lb. .16¾- —
l.c.l., same basis lb. .18¼- .19¼
Acid, hydrochloric, CP, USP prices to dealers 1c per lb. less.
Hydrocyanic, cyls. frt alld lb. 75 95
dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd (see Hydrogen fluoride).
aqueous, bbls. works lb. .21 - —
70%, steel dms., works lb. .18½- .22½
Hydrofluosilic, dms., works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks Belle, W. Va., 100% basis lb. .095 - —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys. lb. .83 - —
Isonicotinic 100 lb fib dms. works lb. 5.00 - —
Itaconic, fib dms., c.l., works lb. .59 - —
l.c.l., works lb. .60 - —
Hydrazide (see Isoniazid).
J, bbls., works, 100% basis lb. 2.50 2.85
Koch, bbls., frt. alld lb. 1.00 - —
L, bbls. works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1754- .215
smaller lots lb. .1854- .225
80%, bbls., 5 or more lb. .3054- .37
smaller lots lb. .3104- .375
plastic grade 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs 6.30 - —
l.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs.12.20 - —
44% bbls., c.l., works 100 lbs.11.45 -11.95
l.c.l., works 100 lbs.11.85 -12.35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .60 - —
Lauric, dms lb. .35½- .37½
Linseed oil, dist., dms lb. .1905- —
w.w., dms lb. .2205- —
Maleic, cryst. powd. dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots, lb. 2.35 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½- —
smaller lots, works lb. .55 - —
Molybdic, 85-92%, dms., works lb. 1.35 - —
Monochloroacetic, purif (see Acid, Chloroacetic mono-)
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .28 - 29¾
1-Naphthol-4-sulfonic (see Acid, Nevile and Winthers).
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic, 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic, 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic, 2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid, Tobias).

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns	No.	number
AMP	American melting point	dlvd.	delivered	nom.	nominal
anhyd.	anhydrous	dms.	drums	o-	ortho
a.p.a.	available phosphoric acid	dom.	domestic	ord.	ordinary
approx.	approximately	E.	east	oz.	ounce
artif.	artificial	e.p.	end point	p-	para
ASTM	American Society for Testing Materials	equald.	equalized	Pac.	Pacific
Atl.	Atlantic	exp.	expressed	pf.	proof
Be.	Baume	F.	fahrenheit	phos.	phosphate
bbls.	barrels	ferment.	fermentation	photo.	photographic
bgs.	bags	f.f.a.	free fatty acid	pkgs.	packages
bls	bales	f.f.c.	free from chlorine	powd.	powdered
bots.	bottles	fib.	fiber	precip.	precipitated
b.p.	boiling point	f.o.b.	free on board	prod.	producer
b.p.l.	bone phosphate of lime	f.p.a.	free of prussic acid	pt.	point
b.r.	boiling range	frt.	freight	pulv.	pulverized
bxs.	boxes	gal.	gallon	purif.	purified
C.	centigrade	gran.	granular	redist.	redistilled
cbys.	carboys	grd.	ground	refd.	refined
CD	completely denatured	i.&a.	iron and aluminum	refy.	refinery
c.i.f.	cost, insurance, freight	i.b.p.	initial boiling point	reg.	regular
cks.	casks	imp.	imported	resub.	resublimed
c.l.	carlots	incl.	included	ret.	returnable
cns.	cans	indust.	industrial	SD	specially denatured
coml.	commercial	kgs.	kegs	s.d.	single distilled
conc.	concentrated	l-	laevo	S. E.	southeast
CP	chemically pure	lacq.	lacquer	sec.	secondary
cps.	centipoises	lb.	pound	secs.	seconds
cryst.	crystal	l.c.l.	less than carlots	s.g.	specific gravity
cs.	cases	l.t.l.	less truckload	ship't	shipment
ctns.	cartons	liq.	liquid	soln.	solution
cyls.	cylinders	mfrs.	manufacturers	s.u.	standard unit
d-	dextro	m-	meta	syn.	synthetic
dbl.	double	m.a.p.	mixed aniline point	tanks.	railroad tankcars
denat.	denatured	min.	minimum	tech.	technical
dest-dist.	destructive-distilled	m.p.	melting point	tert-	tertiary
dl-	dextro-laevo	N-	nitrogen	t.l.	truck loads
dist.	distilled	n-	normal	t.w.	tank wagons
		nat.	natural	USP	U. S. Pharmacopoeia
		neut.	neutral	vis.	viscosity
		NF	National Formulary	VM&P	varnish makers & painters
				w. w.	west
				W.	warehouse
				whse.	water-white

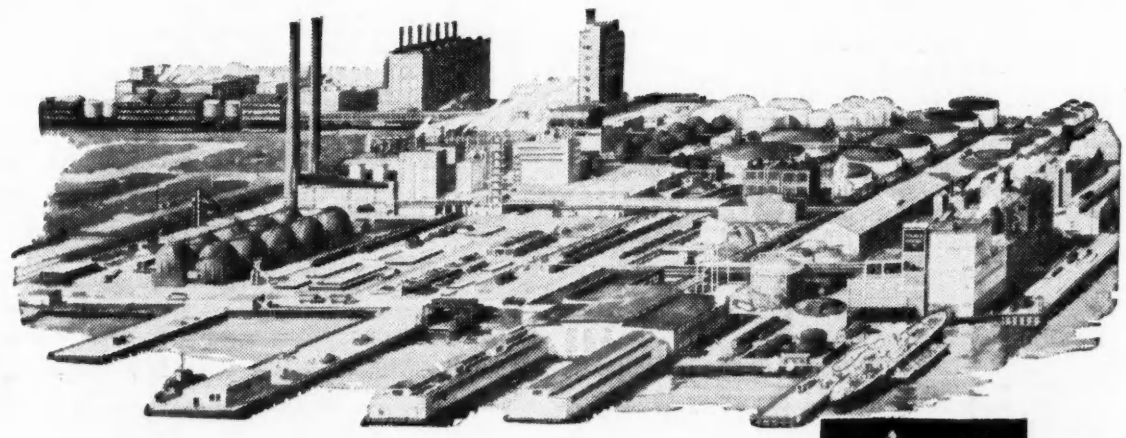
A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, Nevile and Winther's—Alcohol, Diacetone

Acid, Nevile and Winther's, dms., frt. alld	lb.	1.20	—
Nicotinic, USP, dms., frt. adjusted	kilo	8.00	8.30
Amide, USP (see Nicotinamide)			
Nitric, 36° Be cbys., c.l., works, E.	100 lbs.	5.75	—
l.c.l., works, E	100 lbs.	6.05	6.65
38° Be cbys., c.l., works, E	100 lbs.	6.25	—
l.c.l., works, E	100 lbs.	6.55	7.35
40° Be, cbys., c.l., works, E	100 lbs.	6.75	—
l.c.l., works, E	100 lbs.	7.05	7.85
42° Be cbys., c.l., works, E	100 lbs.	7.25	—
l.c.l., works, E	100 lbs.	7.55	8.35
53.5 to 68% HNO_3, tanks, works, 100% basis	100 lbs.	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90	—
CP, NF, consumers, cbys., extra c.l., works	lb.	.13½-	—
l.c.l., same basis	lb.	.11¼-	.11¾
5-pt. bots., extra, cs., c.l., same basis	lb.	.17½-	—
l.c.l., same basis	lb.	.14¾-	.20¾
p-Nitrobenzoic, dms., c.l., works	lb.	.72	—
l.c.l., works	lb.	.73	—
Oleic, s.d., dms	lb.	.18	.20
tanks	lb.	.16	—
dbl. dist. (white), dms	lb.	.20½-	.22½
tanks	lb.	.1850-	—
Oleum (see Acid, sulfuric, fuming)			
Orthochlorobenzoic (see Acid, o-Chlorobenzoic)			
Orthocresotinic (see Acid, 2,3-Cresotic).			
Oxalic, bbls., c.l., works	lb.	.16½-	—
10,000-lb. lots, works	lb.	.16¾-	—
smaller lots, works	lb.	.17¾-	—
Acid, b-oxynaphthoic, bbls., works.	lb.	1.14	—
Palm oil, dbl. dist., dms	lb.	.14¼- .16¼	
Para-aminobenzoic (see Acid, p-Aminobenzoic)			
Para-aminosalicylic (see Acid, p-Aminosalicylic).			
Parachlorobenzoic (see Acid, p-Chlorobenzoic)			
Paramethylphenyleinchonic (see Neocinchophen)			
Paranitrobenzoic (see Acid, p-Nitrobenzoic)			
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)			
Phenylacetic, pure, cryst. cns.	lb.	.75	1.70
Phenyleinchoninic (see Cinchophen).			
Phenylglycolic (see Acid, mandelic).			
Phosphoric, food grade, 75%, cbys., c.l., frt. alld, E	100 lbs.	6.75	—
l.c.l., works	100 lbs.	7.00	8.00
tanks, works	100 lbs.	5.35	—
80%, cbys., c.l., frt. alld.	100 lbs.	7.60	—
l.c.l., works	100 lbs.	7.85	9.10
NF, 85%, cbys., c.l., works	lb.	.0825-	—
l.c.l., works	lb.	.0850-	.0975
tanks, works	lb.	.0640-	—
Picric, NF, bbls.	lb.	.60	—
tech., bbls.	lb.	.34	.35
Propionic, syn., pure, dms., c.l., works	lb.	.21	—
l.c.l., works	lb.	.22	—
tanks, works	lb.	.19	—
Pyrogallic, NF, (see Pyrogallol).			
tech., bbls	lb.	2.76	2.99
Ricinoleic (see Acid, castor oil, split).			
S., bbls., works	lb.	3.25	—
Salicylic, crude, fib. dms., c.l.	lb.	.35	—
l.c.l., same basis	lb.	.36	—
sublimed, tech., fib. dms., c.l.	lb.	.37	—
l.c.l.	lb.	.41	—
USP, cryst., fib. dms	lb.	.48	—
powd., fib. dms	lb.	.55	—
Acid, sebacic, purif., dms., c.l., works	lb.	.59	—
l.c.l., works	lb.	.61	.65
Soybean oil, dbl. dist., dms	lb.	.17¾-	.19¾
tanks	lb.	.15¾-	—
s.d., dms	lb.	.16¼-	.18¼
tanks	lb.	.14¼-	—
Stearic, dbl. pressed, bgs	lb.	.14¾-	.16¾
single pressed, bgs	lb.	.14¼-	.16¼
triple pressed, bgs	lb.	.17	.19
Succinic, purif., cryst., bbls., works	lb.	.62	.75
Sulfanilic, tech., dms., c.l., frt. alld	lb.	.19	—
l.c.l., frt. alld	lb.	.21	—
Sulfuric, 60° Be, cbys., c.l., works	100 lbs.	2.00	—
l.c.l., works	100 lbs.	2.45	—
tanks, works	ton	18.60	—
66° Be, cbys., c.l., works.	100 lbs.	2.25	—
l.c.l., works	100 lbs.	2.55	3.35
tanks, works	ton	22.35	—
98%, tanks, works	ton	23.50	—
99-100%, tanks, works	ton	23.95	—
CP, NF, consumers, cbys, extra, c.l., works, frt. equald	lb.	.09¾-	—
l.c.l., same basis	lb.	.11¼-	.11¾
5-pt. bots., extra cs., c.l., works, frt. alld	lb.	.13¼-	—
l.c.l., same basis	lb.	.14¾-	.20¾
fuming (oleum), 20%, tanks, works	ton	25.00	—
40%, tanks, works	ton	29.00	—
65%, tanks, works	ton	30.50	—
Tallow, dist., dms	lb.	.14¾-	.16¾
hydrogenated, bgs	lb.	.13¾-	.15¾
Tannic, NF, fluffy, bbls., 1,000-lb. lots	lb.	1.80	—
smaller lots	lb.	1.81	1.85
powd., bbls., 1,000-lb. lots	lb.	1.70	—
smaller lots	lb.	1.71	1.76
tech., dms	lb.	.95	—
Acid, tartaric, USP, dom., 230 or 250-lb. dms., c.l.	lb.	.44	—
10,000-lb. lots, 1 shipt	lb.	.44½-	—
smaller lots	lb.	.45	—
100-lb. dms	lb.	.46	—
small, dms.	lb.	.48	.54
imp., bgs	lb.	.38	Nom.
Thioglycolic, refd., cbys., 100% basis	lb.	1.35	1.55
Tobias, bbls., frt. alld	lb.	.77	—
Toluenesulfonic, dms., c.l., works,	lb.	.16	—
l.c.l., works	lb.	.17½-	—
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l.	lb.	.90	—
125 lbs. to t.l.	lb.	1.00	—
p-Toluidine-m-sulfonic, bbls., works	lb.	.92	1.04
Trichloroacetic, bots.	lb.	2.50	2.50
Trichlorophenoxyacetic (see under "T" 2,4,5T)			
Tungstic, tech., kgs., works	lb.	4.25	—
Undecylenic, dms	lb.	1.40	—
Aconite root, bls	lb.	.50	.55
Acrolein, tech., dms., c.l., works.	lb.	.47	—
l.c.l., works	lb.	.47½-	—
Acrylonitrile, dms., c.l., t.l., works.	lb.	.30	—
l.c.l., l.t.l., works	lb.	.31	—
tanks, works	lb.	.27	—
ACTH, cryst., bulk, 1,000 units/gram, bots	gram	15.00	—
Adeps lanae (see Lanolin).			
Adrenocorticotropic hormone (see ACTH).			
Agar, USP, Kobe No. 1, strip, bls.	lb.	3.00	3.25
powdered, 30 mesh, fib.,	dms lb.	3.40	3.50
dl-Alanine, dms., works	lb.	8.50	11.00
Albumin, blood, dark (see Blood, dried, soluble).			
light, dms., c.l.	lb.	.65	.90
Egg, edible, flake, bbls	lb.	1.80	1.85
powd., cryst., bbls	lb.	1.84	1.89
tech., cryst., bbls	lb.	.70	.85
Alcohol, allyl, dms., c.l., dlvd	lb.	.32	—
l.c.l., dlvd	lb.	.33	—
tanks, dlvd	lb	.30	—
Amyl, ex fusel oil (see Fusel oil, refd.)			
ferment., refd., 128°-132°C., dms.,			
l.c.l., dlvd	lb.	.43	—
ACS grade, dms., c.l., dlvd	lb.	.45	—
ex-pentane, mixed, amyls, dms., c.l., frt. alld	lb.	.17	—
l.c.l., frt. alld	lb.	.18	—
tanks, frt. alld	lb.	.15	—
primary, dms., c.l., frt. alld.	lb.	.19¼-	—
l.c.l., frt. alld	lb.	.20¼-	—
tanks, frt. alld	lb.	.17¼-	—
sec-synthetic, dms., c.l., works, frt. alld	lb.	.18	—
l.c.l., works	lb.	.19	—
tanks, works	lb.	.16	—
tert-synthetic, dms., c.l., frt. alld. E	lb.	.17	—
l.c.l., frt. alld. E	lb.	.18	—
tanks, frt. alld. E	lb.	.15	—
1-pentanol, (syn. normal), dms., c.l., works	lb.	.42	—
l.c.l., works	lb.	.43½-	—
tanks, works	lb.	.40	—
2-pentanol, dms., c.l., works	lb.	.65	—
l.c.l., works	lb.	.70	—
tanks, works	lb.	.60	—
Benzyl, NF, dms	lb.	.64	.79
tech., dms., dlvd	lb.	.47½-	.49
n-Butyl, ferment., dms., c.l., frt. alld	lb.	.15	—
l.c.l., frt. alld	lb.	.16	—
tanks, frt. alld	lb.	.13	—
n-synthetic, dms., c.l., dlvd.	lb.	.15	—
l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.13	—
sec-synthetic, dms., c.l., dlvd.	lb.	.13	—
l.c.l., dlvd	lb.	.14	—
tanks, dlvd	lb.	.11	—
tert-synthetic, dms., c.l., frt. alld.	lb.	.14	—
l.c.l., frt. alld	lb.	.15	—
tanks, frt. alld	lb.	.12	—
Capryl, 95%, dms., c.l., works	lb.	.21½-	—
l.c.l., works	lb.	.22½-	.23½
tanks, works	lb.	.19½-	—
Cetyl extra, fib. cns., 500-lb. lots or more	lb.	.73	—
smaller lots	lb.	.80	1.15
NF, fib. cns., 140-lb. lots or more	lb.	.58	.82
smaller lots	lb.	.59	.82
Cinnamic, bots	lb.	2.15	2.75
Decyl mixed isomers, dms., c.l., dlvd.	lb.	.23	—
l.c.l., dlvd.	lb.	.24	—
tanks, dlvd.	lb.	.21	—
normal (see 1-Decanol).			
Denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies	gal.	.54½-	—
l.c.l., same basis.	gal.	.59½-	.65½
tanks, dlvd. same basis.	gal.	.41½-	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
Proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	.56	—
l.c.l., same basis	gal.	.61	.67
tanks, same basis	gal.	.43	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
SD1, dms., c.l., dlvd. E. of Rockies	gal.	.55½-	—
l.c.l., same basis	gal.	.60½-	.66½
tanks, same basis	gal.	.42½-	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.54	—
l.c.l., same basis	gal.	.59	.65
tanks, same basis	gal.	.41	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.53	—
l.c.l., same basis	gal.	.58	.64
tanks, same basis	gal.	.40	—
SD23A, dms., c.l., dlvd. E. of Rockies	gal.	.55½-	—
l.c.l., same basis	gal.	.60½-	.66½
tanks, same basis	gal.	.42½-	—
SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.56	—
l.c.l., same basis	gal.	.61	.67
tanks, same basis	gal.	.43	—
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.54½-	—
l.c.l., same basis	gal.	.59½-	.65½
tanks, same basis	gal.	.41½-	—
SD30, dms., c.l., dlvd. E. of Rockies	gal.	.53	—
l.c.l., same basis	gal.	.58	.64
tanks, same basis	gal.	.40	—
SD35A, dms., c.l., dlvd. E. of Rockies	gal.	.56	—
l.c.l., same basis	gal.	.61	.67
tanks, same basis	gal.	.43	—
SD40, dms., c.l., dlvd. E. of Rockies	gal.	.54	—
l.c.l., same basis	gal.	.59	.65
tanks, same basis	gal.	.41	—

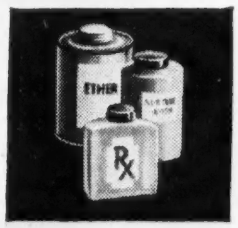
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

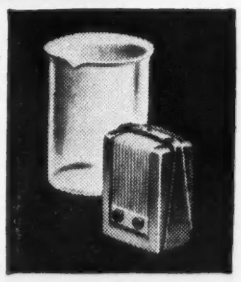
Diacetone, acetone-free, dms., c.l., dlvd	lb.	.14	—
l.c.l., dlvd	lb.	.15	—
tanks, dlvd	lb.	.12	—
tech., dms., c.l., dlvd	lb.	.13½-	—
l.c.l., dlvd	lb.	.14½-	—
tanks, dlvd	lb.	.11½-	—



Put This Plant Behind Your Product

Here at Publicker, we maintain that users of our products can no more afford to take chances with quality than we can. Consequently, every drop in every gallon or tank car is exactly according to specifications—always. And Publicker's ultra-modern equipment and vast facilities account for outstanding service to a long list of satisfied customers. May we have the opportunity of meeting *your* requirements?





ETHYL ALCOHOL • BUTYL ALCOHOL, NORMAL
BUTYL ACETATE, NORMAL • ETHYL ACETATE
BUTADIENE • ACETALDEHYDE • ACETIC ACID GLACIAL
ACETONE C.P. • AMYL ACETATE
FUSEL OIL, REFINED • ISOAMYL ALCOHOL
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Alcohol, ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies..gal.20.48 - —
i.c.l., same basis..gal.20.53 -20.59
tanks, same basis..gal.20.35 - —
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i.c.l., same basis..gal. .56 - .64
tanks, same basis...gal. .40 - —
absolute, 200 pf., tax paid, dms., c.l., dlvd. E. of Rockies. gal.21.58 - —
i.c.l., same basis..gal.21.63 -21.69
tanks, same basis..gal.21.45 - —
2-Ethylbutyl, dms., c.l., works..lb. .29½- —
i.c.l., works.....lb. .30 - —
tanks, works.....lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E.lb. .23¾- —
i.c.l., same basis.....lb. .24¾- —
tanks, same basis.....lb. .21¾- —
Furfuryl, cns., works.....lb. .29 - —
dms., c.l., Cedar Rapids, Ia..lb. .21 - —
Newark, N. J.....lb. .21½- —
i.c.l., Cedar Rapids, Ia....lb. .22 - —
Newark, N. J.....lb. .22¼- —
tanks, Memphis, Tenn.....lb. .184 - —
Hydroabietyl, tech., soild, Zone 1, dms., c.l., dlvd..lb. .27 - —
i.c.l., dlvd.....lb. .27½- —
tanks, dlvd.....lb. .25 - —
Isoamyl, dms., c.l., works, frt. alld. E. lb. .34 - —
i.c.l., same basis.....lb. .35 - —
tanks, same basis.....lb. .32 - —
Isobutyl, dms., c.l., dlvd.....lb. .14 - —
i.c.l., dlvd.....lb. .15 - —
tanks, dlvd.....lb. .12 - —
Iso-octyl, dms., c.l., dlvd. E. lb. .23 - —
i.c.l., dlvd. E.....lb. .24 - —
tanks, dlvd E.....lb. .21 - —
Isopropyl, refd., 91%, dms., c.l., dlvd..gal. .43 - —
i.c.l., dlvd.....gal. .55 - —
tanks, dlvd.....gal. .35 - —
95%, c.l., dlvd.....gal. .50 - —
i.c.l., dlvd.....gal. .57 - —
tanks, dlvd.....gal. .37 - —
99%, dms., c.l., dlvd.....gal. .52 - —
i.c.l., dlvd.....gal. .59 - —
tanks, dlvd.....gal. .39 - —
Lauryl, bots.....lb. 2.00 - 2.50
Methyl (see Methanol).
Metnylamyl (see Carbinol, methyl-isobutyl)
Octyl perfumer's grade, bots..lb. 1.75 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms.....lb. 1.14 - 1.45
standard, dms.....lb. 1.18 - 1.48
n-Propyl, dms., c.l., dlvd.....lb. .12 - —
i.c.l., dlvd.....lb. .13 - —
tanks, dlvd.....lb. .10 - —
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms. c.l., Niagara Falls, N. Y. lb. .44½- —
i.c.l., Newark, N. J., Cedar Rapids, Ia lb. .47 - —
tanks, Niagara Falls, N. Y. lb. .43 - —
Indust. grade, dms., c.l., Niagara Falls, N. Y. lb. .305 - —
i.c.l., Newark, N. J., Cedar Rapids, Ia lb. .33 - —
tanks, Niagara Falls, N. Y.lb. .29 - —
Tridecyl mixed isomers, dms., dlvd..lb. .26 - —
i.c.l., dlvd.....lb. .27 - —
tanks, dlvd.....lb. .24 - —
Wood (see Methanol).
Aldol, 95%, dms., works.....lb. .23 - —
denaturing grade, dms.....gal. 2.15 - —
Aldrin, tech. fib. dms., c.l., t.l., dlvd lb. .80 - —
i.c.l., dlvd.....lb. .85 - —
Aletris root, bgs.....lb. 1.75 - 1.85
Algin (see Sodium alginate).
Allethrin, 90%, dms., frt. alld....lb.28.80 -28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld.....lb. .95 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works.....lb. 1.35 - 1.40
Chloride, dms., c.l., dlvd.....lb. .17 - —
i.c.l., dlvd.....lb. .18 - —
tanks, dlvd.....lb. .15 - —
Starch, solid, dms., works.....lb. .52¾- .54¾
solution, 40%, toluol-butanol, dms., works lb. .25½- .26¼
Aloe, Cape, cs.....lb. .45 - .48
powd., cs.....lb. .50 - —
Curacao, kgs.....lb. .50 - .55
Aloin, USP, bbls., dms., kgs... lb. 3.75 - 3.82
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-TocopherolD.
Alum, ammonium, g r a n., bgs., works..100 lbs. 4.30 - —
lump, dms., works....100 lbs. 5.05 - —
powd., dms., works....100 lbs. 5.20 - —
USP, burnt, dms.....lb. .20 - .21
hydrous, dms.....lb. .07¾- .08
Potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works....100 lbs. 5.30 - —
powd., dms., works....100 lbs. 5.45 - —
USP, burnt, dms.....lb. .20 - .21
hydrous, dms.....lb. .07¾- .08
Potash-chrome, dms.....lb. .17 - —
Sodium, dms., c.l., works..100 lbs. 4.60 - —
l.c.l. works.....100 lbs. 5.00 - —
Alumina, calcined, bgs., c.l., works. lb. .0425- —
l.c.l., works.....lb. .045 - .055
Aluminum acetate, basic soln., 24%, bbls., i.c.l., works lb. .14 - —
Chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15 - —
l.c.l., works, frt. equald, lb. .1550- —
cryst., dms., c.l., works...lb. .1450- —
l.c.l., works.....lb. .1500- —
soln., 32°, cbys., c.l., works lb. .0445- —
l.c.l., works.....lb. .0520- .1293
tanks, works.....100 lbs. 3.45 - —
NF, gran., dms., works.....lb. .29 - .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .15¾- —
l.c.l., works .....lb. .16¾- .18¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., c.l., dms., works..lb. .12 - —
l.c.l., works.....lb. .12½- —
Hydrate, heavy bgs., c.l., frt. equald lb. .0295- —
2,000-20,000 lb. lots, same basis..lb. .042 - —
bulk, same basis.....lb. .027 - —
light, bgs., dlvd.....lb. .18 - —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works.....lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works.....lb. .18 - —
dried, USP, XIV, fib. dms., works lb. .82½- —
contract, works lb. 79½- —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2440- —
pigs, 10,000-lb. lots, frt. alld. lb. .2250- —
Oxide, amorphous (see Alumina, calcined)
Paste, lining, extra-fine, dms lb. .65½- —
standard grade, dms.....lb. .45½- —

Aluminum powder, lining, extra, fine, dms..lb. 1.05½- —
standard grade, dms.....lb. .75 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., frt. alld. lb. .30½- —
Stearate, dibasic, ctns., c.l....lb. .33 - —
l.c.l.....lb. .34 - .37
monobasic, ctns., c.l.....lb. .33 - —
l.c.l.....lb. .34 - .37
tribasic, ctns., c.l.....lb. .33 - —
l.c.l.....lb. .34 - .37
Sulfate, coml., bulk, c.l., works. 100 lbs. 1.85 - —
grd., bgs., c.l., works....ton.37.00 - —
lump, bgs., c.l., works....ton.40.00 - —
iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.55 - —
l.c.l., works, frt. equald. 100 lbs. 3.95 - —

Prices $1 per ton higher in the south.

USP, gran., dms., works....lb. .16 - .18
powd., dms., works.....lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots.....oz. 8.00 -10.00
Aminoazotoluene, base, bbls., 100% basis lb. 1.03 - 1.18
o-Aminobiphenyl, dms., c.l., works lb. .32½- —
l.c.l., works.....lb. .33 - —
tanks, works.....lb. .31 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½- —
l.c.l., dlvd.....lb. .45 - —
tanks, dlvd.....lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., l.c.l., works lb. .60 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
smaller lots .....lb. 2.50 - —
p-Aminophenol, dms., frt. alld ..lb. .97 - .98
Aminophylline, USP 100-lb. dms lb. 3.53 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.85.00 - —
refrigeration, tanks, works, frt. equald..ton.87.50 - —
aqueous (29.4% NH_3), dms., c.l., dlvd. Metropolitan area.. 100 lbs. 3.60 - —
l.c.l., works .....100 lbs. 4.00 - —
tanks, works, anhyd. basis. ton.88.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.65 -11.15
white, gran. (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .38 - —
Benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works. ton.319.50 - —
ton lots, ex whse .....ton.395.00 - —
smaller lots, ex whse...ton.400.00 - —

Alcohol, Ethyl—Ammonium Pentaborate

Ammonium bicarbonate, dom., dms., c.l., works..100 lbs. 6.50 - —
i.c.l., works.....100 lbs. 8.00 - —
imp., dms., l.c.l.....lb. .07¼ .08¼
Bichromate, dms., works.....lb. .42 .43
Bifluoride, dms., dlvd .....lb. .2145 .2245
Bromide, NF, gran., bbls .....lb. .40 - —
Powdered ammonium bromide 10c. per lb. higher.
Carbonate, USP, lump, dms lb .16 - —
Chloride, tech., white, gran., fines, bgs., c.l., works 100 lbs. 5.25 - —
l.c.l. works 100 lbs. 7.00 - —
USP, gran., bbls., dms .....lb. .17¼- —
Citrate, dibasic, bbls .....lb. .75 - —
dms.....lb. .30 - .85
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia, aqueous).
Hypophosphite, NF, dms.....lb 3.07 - —
Iodide, NF, dms., bots.....lb 4.26 4.38
Linoleate, 80%, dms., works lb. .50 - .55
Nitrate dom., fertilizer grade, 33.5% N., bgs., western. works, frt. equald ton.68.00 - —
with dolomite, 20.5% N, bgs., Hopewell, Va ton.51.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton. ton.70.00 - —
western, bgs., c.l. f.o.b. cars, Los Angeles.ton.82.84 - —
Oxalate, fine gran., dms .....lb. .26½- .31
Pentaborate, gran., bgs., c.l., works..ton.187.50 - —
ton lots, ex whse .....ton.271.50 - —
smaller lots, ex whse....ton.276.50 - —
Ammonium pentaborate powder, $10 per ton higher.

To meet your needs . . .

DU PONT SULFURIC ACID

from our new East Chicago plant—

THE WORLD'S LARGEST SINGLE CONTACT UNIT

More than a trainload a week—that's the rate sulfuric acid is turned out by Grasselli Chemical Department's new contact unit at East Chicago, Indiana.

Situated to serve the industrial Midwest, it is another step in Du Pont's long-range expansion and modernization program designed to meet the steadily mounting requirements of industry for this basic chemical.

It joins other postwar moves by Grasselli to boost sulfuric acid production.

1947—New plant built at Richmond, Va.
1949—New contact unit built at Cleveland, Ohio
1953—Contact unit erected at Linden, N. J.

Grasselli also manufactures sulfuric acid at Ecorse, Mich.; Lockland, Cincinnati and Toledo, Ohio, and Wurtland, Ky.

Sulfuric acid from this new unit will be used primarily in the manufacture of steel, petroleum products, chemicals, insecticides, medicines, explosives, storage batteries, and synthetic detergents.

The Grasselli Chemicals Department and its predecessor, the Grasselli Chemical Company, have produced sulfuric acid continuously since 1839, when Eugene Ramiro Grasselli established a plant in Cincinnati, becoming the first man to produce sulfuric acid west of the Alleghenies.

DU PONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Department
Wilmington 98, Delaware

FOR PRICE INFORMATION AND SHIPPING DATA, CALL OR WRITE OUR NEAREST DISTRICT OFFICE.

Atlanta 3, Ga.....739 West Peachtree Street
Chicago 32, Ill. 4251 South Crawford Avenue
Cincinnati 2, Ohio....603 Terrace Plaza Bldg.
Cleveland 14, Ohio 1321 National City Bank Bldg.
Detroit 35, Mich.....13000 West 7 Mile Road
Houston 25, Texas 1100 East Holcombe Blvd.
Minneapolis 2, Minn.....1207 Foshay Tower
New York 1, N. Y.....350 Fifth Avenue
Philadelphia 3, Pa. 1617 Penna. Blvd., Room 860
Pittsburgh 19, Pa.....1715 Grant Bldg.
St. Louis 7, Mo.....112 West Ferry Street
San Francisco 19, Calif. 1400 Sixteenth Street

In Canada—Du Pont Company of Canada Limited, Box 660, Montreal, P. Q.

Ammonium Persulfate—Benzoyl Peroxide

Ammonium persulfate, kgs ..... lb. .38 - .47½
Phosphate comi. bgs. c.l., works, frt. equald lb. .09 - —
l.c.l., same basis ..... lb. .0935- —
dibasic, NF, V bbls., dms. . lb. .46 - —
tech. bgs. c.l works. frt. equald lb. .09 - —
l.c.l., same basis ..... lb. .0935- —
Salicylate, NF, dms., kgs .... lb. 1.62 1.64
Silicofluoride, dms., works .. lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works. lb. .18 - —
l.c.l., works ..... lb. .22 - —
Sulfate coke-oven bulk, producing ovens, base price ..... ton.42.00 -45.00
Oct.-Dec. shipt ..... ton.41.00 -44.00
syn., bulk, c.l., works ..... ton.42.00 -46.00
Oct.-Dec. shipt. ..... ton.41.00 -45.00
purif., dms., works ..... lb. .09 - .09½
Sulfide, liq., 40-44%. dms., c.l., frt. equald., 100% basis. ton.240 00 - —
l.c.l., works, 100% basis. ton 300 00 - —
tanks frt alld. 100% basis ton.180.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, comi., cbys., 100% basis lb. 1.35 - 1.55
highly purif. cbys., 100% basis. lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, fib. dms., frt. alld .... lb. .65 - —
60% soln., dms., c.l., works lb. .06½- —

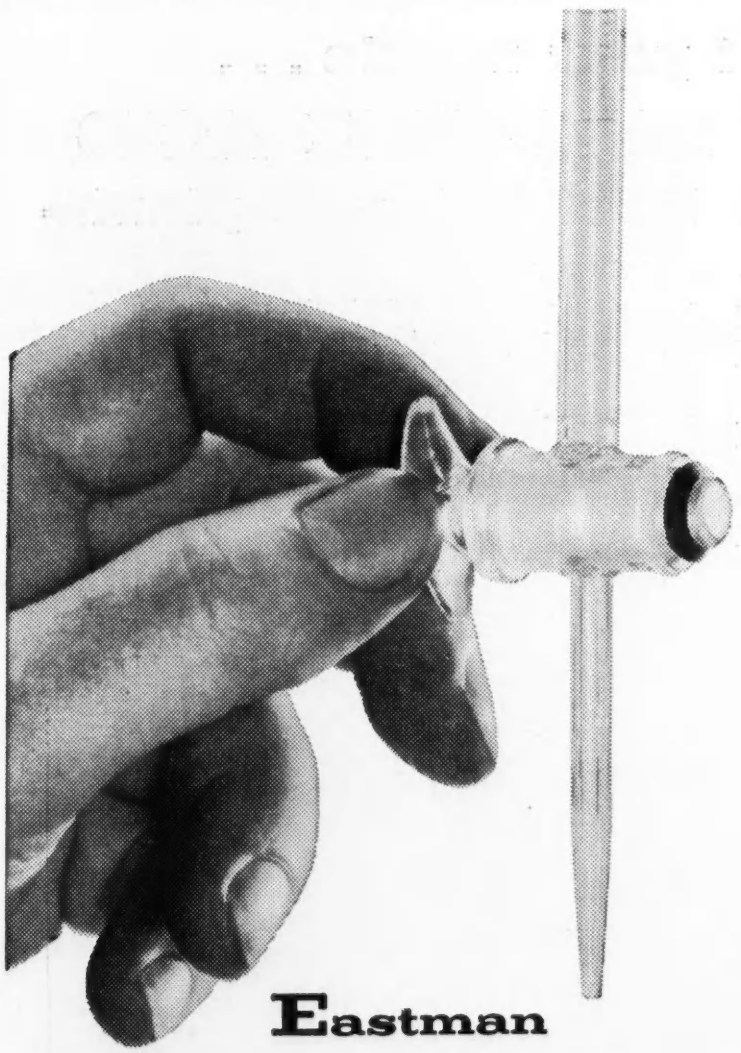
d-Amphetamine hydrochloride dl-basic, bots lb.28.00 - —
dl, dms ..... lb 6.00 - —
d-monobasic, bots ..... lb.28.00 - —
d-Phosphate, dibasic, bots..... lb.28 00 - —
dl, dms ..... lb. 6.00 - —
d-Sulfate, dms ..... lb 28.00 - —
dl, dms ..... lb 6.00 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., frt. alld. E. of Rockies lb. .22 - —
l.c.l., same basis .... lb. .23 - —
tanks, same basis .... lb. .20 - —
syn., oxo process, dms., c.l., dlvd..... lb. .19¼- —
l.c.l., dlvd..... lb. .20¼- —
tanks, dlvd ..... lb. .17¼- —
ex pentane, reg., dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd..... lb. .18 - —
tanks, dlvd ..... lb. .15 - —
tech., dms., c.l., dlvd.... lb. .15 - —
l.c.l., dlvd..... lb. .16 - —
tanks, dlvd ..... lb. .13 - —
Alcohol (see Alcohol amyl).
n-butyrate, dms. ..... lb .90 - 1.25
Cinnamic, aldehyde, dms..... lb. 1.75 - 2.20
Nitrite, USP bots ..... lb 1.75 - 1.83
Salicylate, cns. dms ..... lb. 74 - 1.05
o-tert-Amyl phenol dms. c.l. works. lb. .48 - —
l.c.l., works..... lb. .49 - —
tanks, works..... lb. .46 - —
p-tert-Amyl phenol, dms. c.l. works. lb. .25¾- —
l.c.l., works..... lb. .26¾- —
tanks, works..... lb. .24¾- —
Anethole, NF, cns., dms..... lb. 1.85 - —
tech., dms..... lb. 1.10 - —
Angelica root, dom., bls..... lb. .60 - .70

Aniline oil, dms., c.l., works, frt. alld.. lb. .21 - —
l.c.l., works, frt. alld ..... lb. .22 - —
tanks, works, frt. alld ..... lb. .20 - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld.. lb. .31 - —
l.c.l., same basis..... lb. .33 - —
Anise seed, Mexican, bgs..... lb. No prices.
Spanish, bgs. ..... lb. .27½- .29
Anisic aldehyde, bots., dms..... lb. 1.80 - 2.70
o-Anisidine, dms., works ..... lb. .88 - —
p-Anisidine, dms., works..... lb. .97 - —
Annatto seed, whole, bgs..... lb. .24 - —
powd., dms. ..... lb. .28 - —
Anthracene, 90-95%, bbls., ton-lots, works lb. .70 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5%, bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis ..... lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines..... lb. .33 - —
cs., c.l., mines ..... lb. .33½- —
Oxide, bgs., c.l., frt. alld..... lb. .27 - .29
l.c.l. frt alld ..... lb. .28½- .30½
Sulfide, approx. 65%, bgs., dlvd. lb. .23 - .26
Trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
l.c.l., works ..... lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .60½- .65½
USP, powd., dms ..... lb. .64 - .65
Antipyrine, NF, 200-lb. bbls..... lb. 3.50 - —
Apomorphine hydrochloride, USP, bots..oz.23.40 -23.90
Areca nuts, powd., bbls ..... lb. .15 - .16
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00

l-Arginine monohydrochloride, dms. 1 kilo lots..kilo.74.00 -83.00
Arnica flowers (true montana), bls. lb. 3.00 Nom.
Arsenic metal, lump, bbls., ex whse. lb. .54 - —
Trioxide, USP, dms..... lb. .48 - —
White, powd., bbls., c.l., dlvd..lb. .05½- —
l.c.l., dlvd..... lb. .06½- .07½
Asafetida, cs..... lb. .36 - .39
powd., bbls., dms..... lb. .50 - .53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton.1,300.00- —
No. 2, c.l. (20 tons), mines.ton.675.00 - —
Run-of-mine, c.l., (20 tons), mines ton.556.00 - —
3K, c.l. (20 tons), mines ton.436.00 - —
3R, c.l. (20 tons), mines ton.371.00 - —
3T, c.l. (20 tons), mines ton.348.00 - —
3Z, c.l. (20 tons), mines ton.321.00 - —
4K, c.l. (20 tons), mines ton.173.00 - —
4M, c.l. (20 tons), mines ton.173.00 - —
4T, c.l. (20 tons), mines ton.156.00 - —
4Z, c.l. (20 tons), mines ton.156.00 - —
5D, c.l. (20 tons), mines ton.122.50 - —
5K, c.l. (20 tons), mines ton.122.50 - —
5M, c.l. (20 tons), mines ton.116.50 - —
5R, c.l. (20 tons), mines ton.110.00 - —
6D, c.l. (30 tons), mines ton.78.00 - —
7D, c.l. (30 tons), mines ton.68.50 - —
7F, c.l., (30 tons), mines ton.65.00 - —
7H, c.l. (30 tons), mines ton.55.00 - —
7K, c.l. (30 tons), mines ton.46.00 - —
7M, c.l., (30 tons), mines ton.40.00 - —
7R, c.l. (30 tons), mines ton.39.00 - —
7RF, c.l. (30 tons), mines ton.40.00 - —
7T, c.l. (30 tons), mines ton.37.00 - —
7TF, c.l. (30 tons), mines ton.40.00 - —
8S, c.l., (30 tons), mines..ton.27.00 - —
Asbestos c.l. prices are in U. S. funds, l.c.l., lots, $4 per ton higher.
Asphalt gilsonite, black, jet, bgs., c.l., mines ton.37.00 - —
select, 350° F., fusing pt., bgs., c.l., mines ton.38.00 - —
select, 270°-295°F., fusing pt. bgs., c.l., mines ton.37.00 - —
seconds, 300° - 350°F fusing pt., bgs., c.l., mines ton.32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tank-wagon, refy. gal. .09 - —
emulsion, tanks, tankwagon, refy gal. .09½- .10
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tank-wagon, refy ton.20.00 - —
Aspirin (see Acid, acetylsalicylic).
Atropine, USP, bots ..... oz. 6.25 6.75
Sulfate, USP, bots..... oz. 4.00 4.20

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs..lb. 1.35 - 1.45
Barberry, root bark, bgs..... lb. .28 - .30
Barbital, USP, 100-lb. dms..... lb 4.50 - —
Sodium, USP, dms ..... lb 4.75 4.77
Barium carbonate, precip., bgs., c.l., works..ton.100.00 - —
smaller lots, works.....ton.110.00 - —
Chlorate, kgs., works ..... lb. .32 - .36
Chloride, anhyd., bgs., c.l., works. ton.165.00 - —
l.c.l., works.....ton.175.00 - —
NF, cryst., dms..... lb. .20 - —
tech., cryst., dms., c.l., works. 100 lbs. 6.50 - —
l.c.l., works.....100 lbs. 7.00 - —
Chromate, bgs., frt. equald . lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, cryst., bgs.....ton.190.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., works..... lb. .12½- —
l.c.l. works lb. .14 - —
Oxide, grd., dms., frt. equald.. ton.255.00 - —
l.c.l., works ..... ton.265.00 - —
Peroxide, dms., works ..... lb. .16 - —
Stearate, cms., c.l., frt. alld lb. .37 - —
l.c.l., same basis ..... lb. .38 - .42
Sulfate, tech. (see Barytes and Blanc fixe).
X-ray, dms. ..... lb. .15 - .15½
Sulfide, dms., c.l., works....ton.85.00 - —
l.c.l., works ..... ton.95.00 - —
Barytes, Southern, off-color, bgs., mines..ton.25.00 - —
95-75%, bgs., mines ..... ton.25.00 - —
water-grd., paper bgs., c.l., E. St. Louis..ton.45.00 - —
ex-whse, N. Y.....ton.65.10 - —
Bauxite, bulk, mines.....ton. 6.75 -10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls..... lb. .35 - .37
root, bls..... lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines..ton.14.00 - —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse..ton.80.60 - —
1 ton-lots, ex whse..ton.83.10 - —
low gel., bgs., 5-ton lots, ex whse..ton.78.95 - —
1-ton lots, ex whse....ton.81.45 - —
Benzal chloride, cbys., works....lb. .22 - .23½
Benzaldehyde, NF, dms.....lb. .74 - 1.05
tech., cbys., dms.....lb. .44 - —
Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., high gamma, bgs., c.l., dlvd., gamma..unit-lb. .0075- —
l.c.l., works, gamma unit-lb. .009 - —
low gamma, bgs., c.l., dlvd., gamma..unit-lb. .007 - .0075
l.c.l., works, gamma unit-lb. .0075- .009
Benzidine hydrochloride, bbls., frt. alld., 100% basis. lb. 1.00 - —
Benzocaine, dms. ..... lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa .....gal. .36 - —
Birmingham district..gal. .36 - —
Chicago district.....gal. .36 - —
Cleveland district.....gal. .36 - —
Geneva, Utah.....gal. .36 - —
Johnstown, Pa. .....gal. .36 - —
Lackawanna, N. Y.....gal. .36 - —
Lone Star, Texas.....gal. .36 - —
Lorain, Ohio.....gal. .36 - —
Middletown, Ohio.....gal. .36 - —
Minnequa, Colo .....gal. .36 - —
Philadelphia district..gal. .36 - —
Pittsburgh district....gal. .36 - —
Sparrows Point, Md..gal. .36 - —
Syracuse, N. Y. .....gal. .36 - —
Terre Haute, Ind. ....gal. .36 - —
Youngstown, Ohio....gal. .36 - —
Benzophenone dms ..... lb. 1.40 - 1.70
Benzotrichloride, cbys., frt. equald. lb. .18 - .20
Benzoyl chloride, cbys., dms., c.l., works, frt. equald..lb. .22 - —
l.c.l., same basis. .....lb. .23 - —
tank trucks, dlvd. Metropolitan area. lb. .21 - —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works. lb. .98 - 1.06



acetic acid
- Organic synthesis
- Reaction medium and solvent
- Dyeing assistant

acetic anhydride
- Acetylating agent
- Dehydrating agent in nitration and sulfonation reactions, etc.

propionic acid
- Organic synthesis

propionic anhydride
- Acetylating agent
- Intermediate

n-butyric acid
- For the preparation of butyric esters useful in formulating perfumes and flavorings.

n-butyric anhydride
- Acylating agent
- Intermediate

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Benzyl acetate, f.f.c., cns., dms lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms lb. .62 - 1.10
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald lb. .23 - —
l.c.l., same basis lb. .24 - —
tank trucks, same basis lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.
Cinnamate, cns. lb. 3.60 - 3.90
Formate, cns. lb. 1.30 - 2.10
Isoeugenol, cns. lb. 8.60 - 9.10
Propionate, bots. lb. 1.35 - 1.65
Salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 35.00 -36.25
Hydrochloride, bots. lb. 35.00 -36.25
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb. 5.11 - —
Hydroxide, dms. lb. 4.65 - —
Metal, bxs. ton lots lb. 2.25 -
Nitrate, cryst., dms lb. 2.10 - 2.17
Oxide, anhyd., dms lb. 4.47 - 5.05
Oxychloride, dms lb. 4.37 - 4.42
Phenolsulfonate, fib. dms lb. 5.22 - —
Subcarbonate, USP dms lb. 3.20 - —
Subgallate, NF, fib. dms lb. 3.15 - —
Subiodide, fib. dms. lb. 5.37 - —
Subnitrate, NF, dms lb. 2.65 - —
Subsalicylate, USP, dms lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb. 4.22 - —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse lb. .22½- .26
Ash (see Barium sulfide).
Bone dms. l.c.l., frt. alld lb. .17 .23¼
Pacific coast bone black prices, 2c. per lb. higher
Carbon, channel, pigment, high color, beads, ctns., c.l., works lb. .72 - —
l.c.l., dlvd. or whse. lb. .78 - —
medium color, uncompressed, bgs., c.l., works lb. .12 - —
l.c.l., dlvd. or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
l.c.l., works lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works lb. .0750- —
bgs., c.l., works lb. .0790- —
l.c.l., dlvd. or whse lb. .122 - .125
high modulus, bgs., c.l., works lb. .0550- —
ctns., l.c.l., whse lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., ctns., l.c.l., whse lb. .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works lb. .13¼- —
l.c.l., works lb. .13½- —
Lamp, bgs., c.l., works lb. .16 .45
Mineral, bgs., works lb. .0160- .0675
Blackberry root bark, bls lb. .45 - —
Black haw root bark, bls lb. .63 - .65
tree bark, bls lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
l.c.l., works ton 200.00 - —
direct process, bgs., c.l., works ton 100.00 - —
l.c.l., works ton 110.00 - —
N. Y. whse. ton 140.88 -165.00
Bleaching powder, dms., c.l., works 100 lbs. 5.02 - —
l.c.l., works 100 lbs. 6.52 - —
Blood, dried, 16-16½% ammonia, bgs. unit-ton. 5.75 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 6.00 - —
soluble, bgs., c.l. lb. .14 - .17
l.c.l. lb. .18 - .25
Bloodroot, bls. lb. .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., same basis lb. .49 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
Imitation (see Blue ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash, Prussian and Soda)
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - —
Milori, bbls., same basis lb. .49 - —
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .73 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, bbls., same basis lb. .49 - —
soluble, bbls., same basis lb. .49 - —
Soda, CP, bronze, bbls., same basis lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½- .35
jobbing types, bbls., same basis, lb. .16½- .18¼
regular types, dry, bbls., same basis lb. .22½- .35
Victoria toner, molybdated, PMA, bbls. lb. 4.10 - —
tungstated, PTMA, bbls. lb. 5.15 - —
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E. ton 65.00 - —
Los Angeles ton 82.00 - —
Bone phosphate defluorinated (see D)
of lime (see Calcium phosphate, tribasic).
precipatated (see Calcium phosphate tribasic, NF, precip.).

Borax, tech., anhyd., 99½%, bgs., c.l., works ton 80.50 - —
ton lots ex whse. N. Y. or Chicago ton 130.25 - —
bulk, c.l., works ton 71.50 - —
cryst., 99½%, bgs., c.l., works, ton 69.25 - —
ton lots, ex-whse., N. Y. or Chi ton 119.00 —
smaller lots, same basis, ton 124.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 43.25 - —
ton lots, ex whse., N. Y., Chi ton 93.00 - —
smaller lots, same basis, ton 98.00 - —
bulk, c.l., works ton 36.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 - —
ton lots, ex whse., N.Y., Chi ton 107.50 - —
smaller lots, same basis, ton 112.50 - —
bulk, c.l., works ton 51.25 - —
powd., 99½%, bgs., c.l., works, ton 48.25 - —
ton lots, ex-whse., N. Y. or Chi ton 98.00 - —
smaller lots, same basis, ton 103.00 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 - .24
l.c.l., same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.50
Borontrifluoride gas, cyls., truckload, works lb. .62 - —
lers truckload, works lb. .70 - —

Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
l.c.l., same basis lb. .33 - .38
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .30 - —
l.c.l., same basis lb. .30 - .32
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
l.c.l., same basis lb. .50 - —
Bromoform, pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 - 5.70
Bronze powder aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .14¼- —
l.c.l., works lb. .14½- —
Oxide, metallic, bgs, works lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .04¼- .15¼
l.c.l., works lb. .04½- .15½
raw, paper, ogs. c.l. works lb. .04½- .13
l.c.l. works lb. .04¾- .13¼
Umber, burnt, American, bgs., c.l., works lb. .06 - —
l.c.l., works lb. .06¼- .07
Turkey type bgs., c.l. Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .06¾- —
l.c.l., works lb. .07 - —
raw, American, bgs. works lb. .06¼- .06½
Turkey-type, bgs., works lb. .06¾- .07
Vandyke bbls. works lb. .09½- .12
Brucine, cns., 100-oz. lots oz. .20 - .25
Sulfate, NF, cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb. .65 - —

Benzyl Acetate—6-tert-Butyl-m-cresol

Butadiene, refd., cyls., c.l. refy lb. .21 - —
l.c.l., refy. lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .02½- —
N. Y. harbor gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
syn., dms., c.l., dlvd. E. lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .12½- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. 10¾- —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works lb. .37½- —
l.c.l. works lb. .38 - —
Ether, dms., c.l., works lb. .32½- —
l.c.l., works lb. .33¼- —
tanks, works lb. .31 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42 - —
l.c.l., same basis lb. .47 - —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works. lb. .70 - —
l.c.l., works lb. .55½- —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate, dms lb. 4.50 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., l.c.l., frt. equald, lb. .25 - .27
Butylamine (see mono-, di-, and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .48 - —

Alkane

(Basic material in manufacture of surfactants)

Detergent Slurry

Detergent D-40

Detergent D-40SF

SURFACTANTS

Detergent D-40FG

Detergent D-60

Wetting Agent S

Dispersant NI-W

Dispersant NI-O

BY THE WORLD'S LARGEST PRODUCER OF SYNTHETIC DETERGENT RAW MATERIALS

Have a problem that requires a detergent? A wetting agent? An emulsifier? A foaming agent? Whether you require the basic raw material or a surfactant in intermediate form or a finished product—it will pay you to investigate the complete Oronite line.

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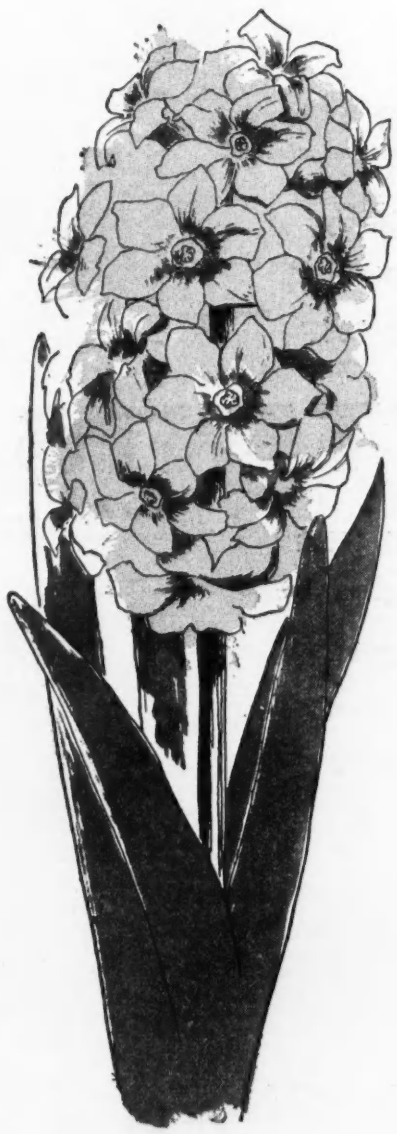
p-tert-Butylphenol—Charcoal, Hardwood

p-tert-Butylphenol, bgs., c.l., works, lb. .25½- —
l.c.l., works lb. .26½- —
Butyraldehyde, dms., c.l., dlvd lb. .21½- —
l.c.l. dlvd lb. .22½- —
tanks, dlvd lb. 19½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide, 25-lb. fib. dms lb 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms., 100-lib. lots or more lb. 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb lots or more. lb. 2.80 - —
citrated, USP. dms., 100-lb lots or more lb. 2.70 - —
Calamine, USP. dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works gram. .65 - —
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb 7.00 - —
smaller lots, same basis lb 7.05 - 7.50
Arsenate, dealers, drums., c.l., whse., works, frt. alld. un 96 lbs. or over lb. .09 - .10
l.c.l., same basis lb. 10 - —
Bromide, NF, jars lb. .94 - .98
Calcium carbide, standard generator size, dms., c.l., dlvd. ton.134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 7.50 -10.00
chalk, whiting, 325 mesh, bgs., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
precip., dense, bgs., c.l., works, ton.30.00 -33.00
l.c.l., works ton.40.00 -48.00
medium, bgs., c.l., works ton.35.00 - —
l.c.l., works ton.45.00 -50.00
surface treated, bgs., c.l., works ton.35.00 -50.00
l.c.l., works ton.45.00 -65.00
ultrafine, bgs., c.l., works, ton.110.00 -160.00
l.c.l., works ton.120.00 -175.00
Chloride, cryst., purif., dms. lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald. ton.29.00 - —
liquor, 40%, tanks, frt. equald, ton.12.35 - —
pellets, bgs., c.l., works ton.35.00 - —
powd., bgs., c.l., works ton.39.65 - —
solid, 73-75%, dms., c.l., frt. equald ton.27.50 - —
l.c.l., works, same basis, ton.34.00 -71.00
USP, gran., dms. lb. .32 - —
Chromate, bgs., frt. equald. lb. 29½- .30
Cyanide, dms., dlvd. E. of Rockies lb. .24 - .50
Cyclamate, 100-lb. fib. dms lb. 2.95 - —
Gluconate, AA, bbls., dms lb. .70 - .72
USP, bbls., dms lb. .53 - .65
Calcium hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies cs.22.60 -24.75
dms., 100-lb., same basis dm.28.65 -32.50
Hypophosphite, dms., ton lots or less lb .90 - .93
Iodide, jars lb. 4.52 - —
Lactate, USP, dms., 10,000-lb. lots or more, works lb. .40 - —
smaller lots, works lb. .41 - .48
Mandelate, USP, dms, works lb. 2.10 - 2.25
Naphthenate, liq., 4% Ca., dms., frt. equald. lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton.46.00 - —
tech., dms., works lb. .13 - —
Pantothenate, jars, 100-gram lots or more, frt. adjusted gram. .06 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms lb. .70 - —
Phosphate dibasic, USP, bgs., c.l., frt. equald. 100 lbs. 7.75 - —
l.c.l., frt. equald. 100 lbs. 8.50 - —
feed grade, 18½% P, bgs., c.l., t.l., frt. equald. ton.74.00 - —
l.c.l., frt. equald. ton.79.00 - —
20% P, bgs., c.l., t.l., frt. equald. ton.84.55 - —
l.c.l., frt. equald. ton.96.00 - —
21% P, bgs., c.l., t.l., frt. equald. ton.84.00 - —
l.c.l., frt. equald. ton.89.00 - —
monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 6.90 - —
smaller lots, same basis, 100 lbs. 7.40 - —
tribasic, NF, precip., bgs., c.l., frt. equald. 100 lbs. 8.25 - —
l.c.l., frt. equald. 100 lbs. 9.00 - —
Phytate, bgs., works lb. .37 - —
Resinate, precip., dms., frt. alld., works lb. .30½- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
l.c.l., works lb. .06½- —
paint grade (see Wollastonite).
Stearate, ctns., c.l. lb. .35 - —
l.c.l. lb. .36 - .40
Sulfate (see Gypsum).
Calomel, USP, powd., dms. lb. 5.42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .15 - —
l.c.l., same basis lb. .16½- —
Chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs. lb. 3.25 - 3.67
nat., USP, powd., cs., 100-lb. lots, lb. .85 - —
tablets, 1-oz., ½-oz. cs lb. .85 - —
syn., tech., 1 bbl. or more lb. .52 - —
USP, gran., powd., bbls, 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb. 4.50 - 5.25
from African pepper, dms lb. 4.35 - 5.00
Caraway seed, Dutch, bgs. lb. .18 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbinol, methyl isobutyl (see Methyl isobutyl carbinol).
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area. ton.73.00 -115.00
cyls., same basis lb. .08 - —
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points lb. .07 - —
l.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, same basis lb. .0513- —
Tetrachloride, CP, consumers, dms., c.l., l.c.l., frt. alld lb. .11½- .13¾
tech., consumers, dms. c.l. E. Rockies, frt. alld lb. .10½- —
W. of Rockies, f.o.b. stockpoints lb. .11 - —
l.c.l., E. of Rockies, frt. alld lb. .12¾- —
W. of Rockies, f.o.b. stockpoints lb. .13¼- —
tanks, E. of Rockies, frt. alld lb. .09½- —
W. of Rockies, f.o.b. stockpoints lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb 4.00 - 4.25
smaller lots, works lb 4.10 - 4.75
Cardamom fruit, fancy, bold, cs. lb. 3.88 - —
selected, bleached, cs lb. 3.65 - —
decorticated, Ceylon, cs lb. 2.75 - —
Guatemalan, cs. lb. 2.25 - —
green, Ceylon, bgs. lb. 1.90 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd lb.14.40 - —
smaller lots, dlvd lb.14.50 -15.20
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .38 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units. .12 - —
microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .26 - —
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram. .40 - —
in vegetable oil, 400,000 A units per gram, cns. gram. .096 - —
Carvol, bots lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .30 - .31
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb. .27 - .30
premium, bgs., 10,000-lb. lots or more, shipt. point lb. .33 - .40
Imp., Argentine, acid-precip., grd., bgs., c.l., duty paid lb. .24 - .25
New Zealand, same basis lb. .25½- .26⅛
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —
Cassia, Batavia, cuttings, bls lb. .14¾- .16⅛
longstick, cracked, bls lb. .16½- —
shortstick, cracked, bls lb. .15½- —
Corinje, bbls. lb. .16 - .18
Castor beans, bgs., f.o.b. Brazil ton.130.00 - —
Oil (see Oil, castor).
Pomace, bgs., c.l., works ton.40.00 Nom.
Castoreum, nat., cns lb. 5.00 -30.00
syn., cns lb. 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs., shipt. lb. .29 - —
Indian, bgs. .16 - —
Cellulose scrap (see Pyroxylin scrap).
Acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E. lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd E lb. .585 - .595
half-second, bgs., dlvd. E. lb. .545 - .555
Cerium chloride, dms., dlvd. lb. .35 - —
Hydrate, 74% CeO_2, fib. dms., 100-lb. lots or more lb. 1.44 - —
77% CeO_2, fib. dms., 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.32 - —
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 - 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .85 - —
Roman, cs lb. 1.50 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½- .32⅛
smaller lots works lb. .27 - .50
Bone (see Black, bone).
Hardwood, briquets, bgs., c.l., works ton.77.00 - —
gran., bgs., works ton.77.00 - —
bulk, c.l., works ton.72.00 -75.00



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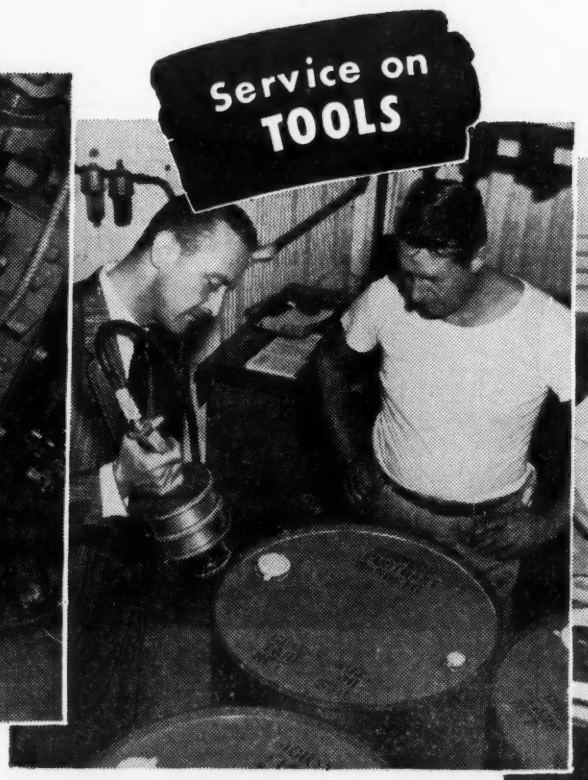

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Charcoal, Pinewood—Copper Undecylenate

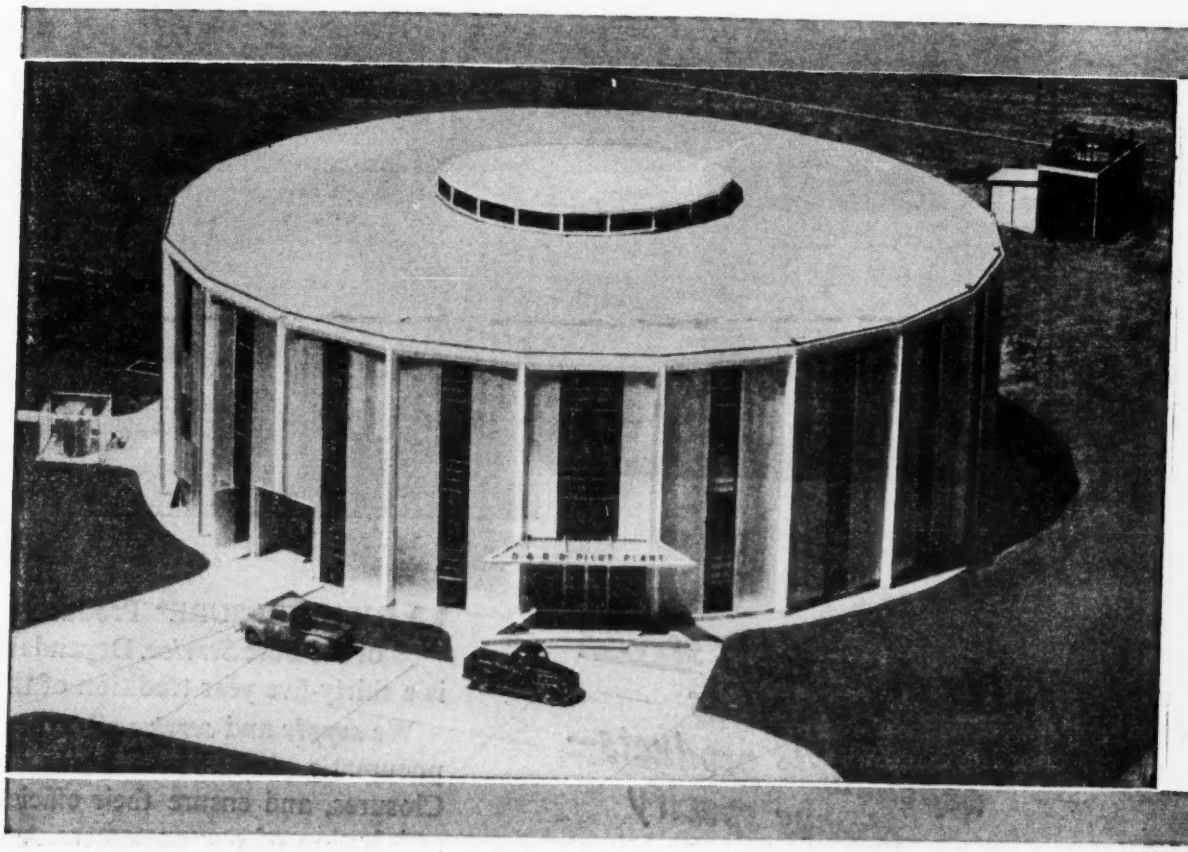
Charcoal, pinewood, gran., powd., bgs., c.l., works, South. ton 55.00 - —
l.c.l., works, South ton 55.00 - 65.00
lump bgs., c.l., works, South. ton 51.50 - —
l.c.l., works, South ton 54.50 - 69.00
bulk, c.l., works, South ton 36.00 - —
Chestnut extract, liq., 25% tannin, bbls., c.l., works lb. .04¾- —
l.c.l., works lb. .0510- —
tanks, works lb. .04 - —
powd., 60% tannin, bgs., extra, c.l., works lb. .1032- —
l.c.l., works lb. .1102- —
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.00 - —
500-lb. lots lb. 1.03 - —
100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
clarif., dms., c.l., frt. alld lb. .69 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .15½- —
l.c.l., same basis lb. .16½- —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.05 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.92 - —
3 cars, same basis 100 lbs. 4.12 - —
2 cars, same basis 100 lbs. 5.12 - —
1 car, same basis 100 lbs. 7.12 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., c.l., frt. equald lb. .75 - —
l.c.l., same basis lb. .80 - —
o-Chloroaniline, dms., c.l., works, frt. equald lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
o-Chlorobenzaldehyde, dms., works. lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works. lb. 2.00 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald. lb. .35½- —
l.c.l., same basis lb. .36½- —
p-Chlorophenol, dms., c.l., frt. equald lb. .35½- —
l.c.l., same basis lb. .36½- —
Chlorophyll, oil-soluble, not fixed, 4%, pails, tins, works lb. 4.25 - —
copper fixed, 6½% tins, pails, works lb 4.25 - —
dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14%, dms., works lb. 8.90 - —
conc., dom., 50%, dms., works, 100% basis lb. 42.00 - —
75%, dms., works, 100% basis lb. 45.00 - —
90%-100%, dms., works, 100% basis lb. 45.00 - —
imp., 60%, tins, 100% basis. lb. 58.00 - —
75%, tins, 100% basis lb. 58.00 - —
90%, tins, 100% basis lb. 58.00 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 180 lbs. frt alld lb. .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Cholesterol, USP, fib. dms., 100-lb. lots lb. 6.85 - 9.00
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chloride, fib. dms., frt. adjusted. lb. 1.25 - 1.35
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Fluoride, bbls., works lb. .51 - .53
Green (see Green, chrome).
Oxide (see Green chromium oxide)
Trioxide, NF bots lb. .82 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine, cryst., cns., 100-oz. lots. oz. .65 - —
Sulfate, cns., 100-oz. lots oz. .35 - —
Cinchonine, cryst., cns., 100-oz. lots. oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30⅛
Cinchophen, NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85
Cinchophen-sodium, dms., frt. adjusted lb. 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Aldehyde, cns., dms. lb. 1.00 - 1.30
Cinnamon, Ceylon, No. 2, bgs lb. .64 - —
"0000," bgs., afloat lb. .85 - —
Citral, bots., cns lb. 5.65 - 5.90
Citronellal, bots., dms lb 1.85 - 2.50
Citronellol, bots., dms. lb. 4.85 - 5.15
Civet, artif., bots lb. 13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton 10.00 - —
purif., bgs., c.l. Tenn ton 20.50 - —
imp., airfloated, bgs., c.l., Atl. port long ton 42.00 -45.00
lump, bulk, Atl. port long ton 27.00 -30.20
China, dom., dry-grd., airfloat, 99%, 325 mesh, bgs., c.l., Georgia works ton 10.00 - —
l.c.l., Georgia works. ton 15.50 - —
300 mesh, bgs., c.l., Georgia works ton 13.50 -14.50
l.c.l. ton 35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton 20.00 -35.00
powd., bgs., c.l. ex dock net ton 30 00 —
l.c.l., ex whse. net ton 60.00 -65.00

Clove, Madagascar, bgs. lb. .43 - —
Zanibar, bgs. lb. .47 - —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis. lb. .37 - —
less than 23,000 lbs., dlvd. E. 100% basis lb. .41 - —
65%, low or medium vis, bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd. E., 100% basis. lb. .41 - —
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. 57 - —
CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.
Coaltar, crude, resale for solns., dms., c.l., ex-whse gal. .255 - —
l.c.l., ex-whse gal. .275 - —
tanks, ex works gal. .155 - .159
refd., resale, dms., c.l., ex-whse. gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - —
Carbonate, 46% powd., bgs. dlvd. lb. 2.15 - —
Chloride, 24.2% Co. kgs. dlvd., lb. 1.20 - —
Hydrate, 60-61% Co. bbls., dlvd. lb. 2.72 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .48¼- —

Cobalt nitrate, 20.1% Co, bbls., dlvd. lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms. lb. .29¾- —
Sulfate, cryst. 21% Co., dms., dlvd lb. .89 - —
monohydrated, 33% Co., dms. dlvd lb. 1.40 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots. oz. 13.75 - —
Cocillana bark, bgs lb. .40 - .50
Cocoa, butter, bgs lb. .54 - .59
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots. oz. 11.75 - —
Phosphate, USP, cns., 100-oz. lots. oz. 10.25 - —
Sulfate, USP, cns., 100-oz. lots. oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz. 33.50 -40.00
Colchicum root, bls lb. .45 - .53
seed, bgs lb. .75 - 1.00
Collodion, USP, dms lb. .32½- —
flexible, USP, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. No prices.
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
Carbonate, 55%, bgs., c.l., works. lb. .3625- —
l.c.l., works lb. .3775- —

Copper chloride, anhyd., bbls., works lb. .48 - .48½
cryst., bbls., works lb. .32¾- .33¼
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .80½- —
1,000-lb. lots or more lb. .81½- —
smaller lots lb. .83½- —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate, dms., c.l., frt. alld. E. Miss. lb. .55 - —
l.c.l., same basis lb. .55½- —
Metal, electrolytic, dlvd., Valley basis lb. .43 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Nitrate, tech cryst., bbls., works lb. .33¼- —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 500-lb. lots or more, works lb. .53¾- .61½
red, 97%, USN Type I, bbls., lb. .66½- .80
90%, USN Type II, bbls., 500-lb. lots or more, works lb. .57½- .64½
Oxychloride, dms., c.l., works lb. .54¾- —
l.c.l., works lb. .55¼- .65¼
Quinolinate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½- —
Sulfate, CP, gran., bbls., works. lb. .2180- —
cryst., 99%, bgs., c.l., works. 100 lbs. 14.90 - —
l.c.l., same basis 100 lbs. 15.40 -17 90
monohydrated, 35% dms., c.l., works 100 lbs. 24.00 - —
l.c.l., works 100 lbs. 24.75 - —
tribasic, dealers, bgs., c.l., works, frt. equald 100 lbs. 32.25 - —
l.c.l., same basis 100 lbs. 33.25 -36.25
Undecylenate, dms lb. 2.00 - 3.00

Birthplace of better petrochemicals



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Rapidly expanding petrochemical facilities, exemplified in a new and unique research building, are making service to Conoco customers even more comprehensive and efficient than in the past.

Conoco's new Development and Research Pilot Plant in Ponca City, Oklahoma, is one of the most unusual structures of its kind. Converted from an 80,000-barrel oil-storage tank, it is cylindrical in shape with a center well extending from bottom to top.

A growing staff of trained technical specialists will occupy the air-conditioned offices and laboratories which are situated around the well. Suspended from the "cap" of the building is a travel hoist which is used for handling heavy equipment.

In this "house of petrochemical progress," new and better Conoco products are being developed . . . new ways to help you with your particular problems.

Copra, Atl. Gulf ports, c.i.f. ton 162.50 - —
Pacific ports, c.i.f. ton 157.50 - —
Coriander seed, Moroccan, bgs. lb. .11½- —
Roumanian, bgs. lb. .08 - —
Yugoslavian, bgs. lb. .08½- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.11 - —
l.c.l. 100 lbs. 7.26 - —
Syrup, 42°, dms., c.l. 100 lbs. 7.08 - —
l.c.l. 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric Chloride)
Cortisone acetate, NNR, bulk gram 3.50 3.55
Cottonseed meal, expeller, 41%, bgs., Memphis ton 57.00 -58.00
Coumarin, NF, cryst., dms. lb. 3.20 - 3.45
Cramp bark, NF, bls lb. 85 90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, cbys. lb. 3.05 3.26
Coaltar crude, tanks, works, frt. adjusted gal. .22 —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 1.35
pinewood, tanks, works lb. .528 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt equald lb. .148 - —
l.c.l., same basis lb. .151 - —
tanks, same basis lb. .135 - —
USP, non-ret., dms., c.l., same basis lb. .158 - —
l.c.l., same basis lb. .161 - —
ret dms., c.l., same basis lb. .140 - —
l.c.l., same basis lb. .145 - —
tanks same basis lb. .145 - —

m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald. .158 - —
l.c.l., same basis lb. .161 - —
tanks, same basis lb. .145 - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .198 - —
l.c.l., same basis lb. .201 - —
tanks, same basis lb. .185 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .173 - —
l.c.l., same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .153 - —
l.c.l., same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .49 - —
l.c.l., dlvd lb. .51 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Insecticide, dealers, bgs., c.l., dlvd 100 lbs. 16.75 - —
l.c.l., dlvd 100 lbs. 17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .26 - .27
l.c.l., works lb. .27 - .27½
Cubeb berries, XX, NF, bgs. lb. .60 - .65
powd., cs lb. .75 - .80

Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .12 - —
Turkish, bgs. lb. .12½- —
Cutch extract, 65% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 - —
pulv., 21% N, bgs., works. unit-ton 2.75 - —
indust. grade, bgs., c.l., works ton 75.00 - —
l.c.l., bgs., works ton 96.00 - —
6-16 mesh, dms. c.l., works ton 120.00 - —
l.c.l., works ton 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½- .37¾
l.c.l. works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —
Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .47½- —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots. gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

Copra—Diethylene Glycol Monomethyl Ether

D

2-4-D, tech., dms., c.l., works, frt. equald lb. .41½- —
l.c.l., same basis lb. .46½- .48½
Butyl ester, dms., c.l., works. lb. .43 - —
l.c.l., same basis lb. .48 - .50
Isopropyl ester, dms., c.l., works. lb. .43 - —
l.c.l., works lb. .48 - .50
Dandelion root, bls lb. .33 - .40
DDD, tech., flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib. dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l. dlvd. lb. .43 - —
tanks, dlvd. lb. .38½- —
Deerstongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton 53.40 - —
14½% P, paper bgs., c.l., t.l., works ton 48.00 - —
17% P paper bgs., c.l., t.l., works ton 56.00 - —
18% P, paper bgs., c.l., t.l., works ton 69.85 - —
Degras, common, bbls lb. .11 - .12
neutral, less 2% f.f.a., bbls lb. .21 - .22
over 2% f.f.a., bbls lb. .20 - .21
d-Desoxyephedrine hydrochloride bots lb 25.00 - —
dl, bots. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.13 - —
l.c.l. 100 lbs. 9.30 - —
canary, paper bgs., c.l. 100 lbs. 8.89 - —
l.c.l. 100 lbs. 9.04 - —
dark, paper bgs., c.l. 100 lbs. 8.99 - —
l.c.l. 100 lbs. 9.14 - —
white, paper bgs., c.l. 100 lbs. 8.73 - —
l.c.l. 100 lbs. 8.88 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.
Potato, imported, bgs lb. .10½- .11
Dextrose, USP, dms. lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works lb. .32¼- —
tanks, works lb. .28¾- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works lb. .32¼- —
tanks, works lb. .28¾- —
o-Dianisidine, fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd, E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½- .67
tanks, works, dlvd lb. .64 - .64½
Tartrate, dms., works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., lb. .30½- .31½
l.c.l., dlvd lb. .31½- .32½
tanks, dlvd lb. .29½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., same basis lb. .17 - —
Dichlorodiphenyltrichloroethane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works lb. .05¾- —
tanks, works lb. .04¼- —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾- —
tanks, works lb. .49¾- —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld. lb. .58¼- .59
l.c.l. same basis lb. .59¼- .60
Dieldrin, dms., frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd, E. lb. .26½- —
l.c.l., same basis lb. .27½- —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69 - —
l.c.l., dlvd lb. .70 - —
tanks, dlvd lb. .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l., dlvd. lb. .28 - —
tanks, dlvd. lb. .25 - —
Sulfate, dms., c.l., works lb. .18¾- —
l.c.l. works lb. .19¼- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd, E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd, E. lb. .17¾- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., works lb. .47½- —
l.c.l., works lb. .48 - —
Monobutyl ether, dms., c.l., dlvd, E lb. .30¼- —
l.c.l., dlvd, E lb. .31¼- —
tanks, dlvd, E lb. .28¼- —
Acetate, dms., c.l., works lb. .30 - —
l.c.l., works lb. .30½- —
tanks, dlvd E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd, lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
Acetate, dms., c.l., works lb. .28¾- —
l.c.l., works lb. .27¼- —
tanks, dlvd, E lb. .25¼- —
Monomethyl ether, dms., c.l., dlvd lb. .20½- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .18½- —

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WATER-SOLUBLE SULFONATES—produced from NEOLENE 400. Available as sulfonate slurry, sulfonic acid, or in spray-dried and drum-dried forms.

OIL-SOLUBLE SULFONATES—manufactured by sulfonation of synthetically produced hydrocarbon under closely controlled conditions.

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Continental Oil Company

Petrochemical Department, Division D-10
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Diethylene Triamine—Dyes, Coaltar

Diethylenetriamine, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 100 00 - —
1-kilo lot kilo. 110 00 - —
Digitalis leaves, USP, dom., dms., lb 90 1.10
Digitoxin, USP, bots gram. 5.00 5.50
Diglycol laurate dms lb. .35 .38
Stearate, dms., ton lots lb. .25 - —
Dihexyl sebacate, dms., c.l., works. lb. .64 —
l.c.l., works lb. .64½ .65
tanks, works lb. .62 —
Dihydrazine sulfate, dms., works. lb. 1.10 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .063 - .07
Sulphate, bulk gram. .063 - .07
2,2-Dihydroxy-5,5'-dichloro-diphenyl-methane, pure, dms lb 2.80 3.00
tech. dms lb. 1.04 - 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, same basis lb .13½- —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l. same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
l.c.l., dlvd. E lb. .11 - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30½- —
Di-iso-octyl sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .22¾- —
l.c.l., same basis lb. .23¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs. lb. .09½- —
nat., bgs. lb. .09 - —
Dimethyl anthranilate, cns. lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd lb. 1.43 - —
l.c.l., dlvd lb. 1.45 - —
tanks, dlvd lb. 1.40 - —
70%, dms., c.l., dlvd., 100% basis lb. 1.02 - —
l.c.l., dlvd., 100% basis lb. 1.03 - —
tanks, dlvd., 100% basis lb. 1.00 - —
Hydroquinone, dms. lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30½- —
tanks, dlvd. lb. .27½- —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., works lb. 1.28 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal., ret. dms., c.l. works lb. .15 - —
l.c.l. works lb. .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29¼- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28¼- —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline, dms., frt. equald lb. .57 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89°C., dms. lb. .24 - —
3,4-Dinitrochlorobenzene, dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld. E lb. .15¾- —
tanks, frt. alld., E lb. .15 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms lb. .10 - —
refd., 63 C., dms lb. .21 - —
Dioctyl adipate, dms., c.l., works. lb. .44½- —
l.c.l., works lb. .45½- —
tanks, works lb. .42½- —
Phthalate, dms., c.l., frt. alld lb. .32½- —
l.c.l., frt. alld lb. .33½- —
tanks, frt. alld lb. .30½- —
Sebacate, dms., c.l., works, lb. .60 - —
l.c.l., works lb. .60½- .61
tanks, works, dlvd lb. .58 - .58½
Di-o-tolyguanidine, dms., ton lots, dlvd lb. .60 - —
smaller lots, dlvd lb. .61 - —
1,4-Dioxane, dms., c.l., works lb. .28¾- —
l.c.l. same basis lb. .29¼- —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse gal. .64 - —
steam-dist., dms., c.l., works, South. gal. .59 - —
dlvd. N. Y. gal. .67 - —
tanks, works, South gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾- —
l.c.l., works lb. .53¾- —
Diphenylguanidine, bgs., dms., ton lots lb. .50 - —
smaller lots lb. .51 - .52
Diphenylhydantoin-sodium USP, cns lb. 5.30 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock ton 70.00 -72.00
Divinylbenzene, 20-25%, dms., c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .19 - —
40-50%, dms., c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.15 - —
Dodecylbenzene, dms., c.l., frt. equald lb. .14 - —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .12 - —

Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd:—

Blue, FD & C, No. 1, cns lb.17.00 -17.60
No. 2, cns lb.17.00 -17.60
Green, FD & C, No. 1, cns lb.17.00 -17.60
No. 2 cns lb.22.20 -22.85
No. 3, cns lb.35.25 -35.90
Orange, FD & C, No. 1, cns lb. 3.65 - 3.75
No. 2, cns lb. 4.65 - 4.75
Red, FD & C, No. 1, cns lb. 7.55 - 7.85
No. 2, cns lb. 4.00 - 4.10
No. 3, cns lb.22.20 -22.85
No. 4, cns lb. 7.20 - 7.50
No. 32, cns lb. 5.30 - 5.40
Violet, FD & C, No. 1, cns lb.17.00 -17.60
Yellow, FD & C, No. 1, cns lb.10.50 -11.05
No. 3, cns lb. 3.30 - 3.40
No. 4, cns lb. 3.30 - 3.40
No. 5, cns lb. 4.00 - 4.10
No. 6, cns lb. 4.00 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots. dlvd:—

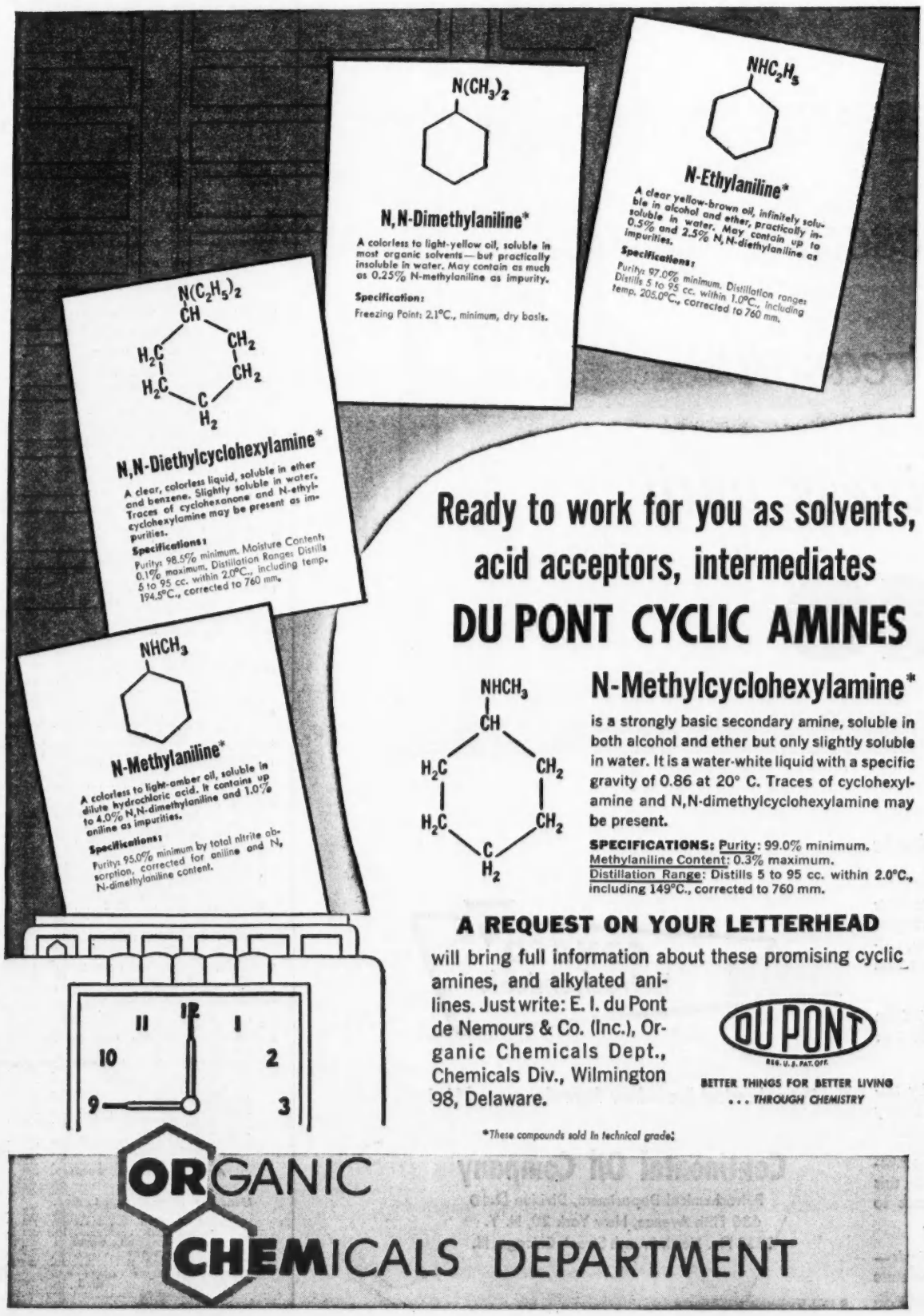
Black, D&C, No. 2, cns lb.10.95 - —
Brown, D&C, No. 1, cns lb.16.10 - —
Green, D&C, No. 5, cns lb.16.10 - —
No. 6, cns lb.16.10 - —
No. 7, cns lb.14.80 - —
Orange, D&C, No. 3, cns lb.10.95 - —
No. 4, cns lb.20.05 - —
No. 5, cns lb. 5.70 - —
No. 10, cns lb.20.70 - —
Red, D&C, No. 8, cns lb. 2.85 - —
No. 9, cns lb. 2.85 - —
No. 10, cns lb. 2.30 - —
No. 11, cns lb. 1.85 - —
No. 12, cns lb 2.65 - —
No. 17, cns lb.10.95 - —
No. 18, cns lb.24.00 - —
No. 19, cns lb.15.45 - —
No. 21, cns lb. 3.60 - —
No. 22, cns lb.10.95 - —
No. 28, cns lb.24.65 - —
No. 33, cns lb.17.45 - —
Violet, D&C, No. 2, cns lb.16.10 - —
Yellow, D&C, No. 7, cns lb.10.95 - —
No. 10, cns lb.13.50 - —
No 11, cns lb.13.50 - —

Dyes, coaltar, certified, colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots. dlvd:—

Blue, Ext., D&C, No. 1, cns lb.16.10 - —
Green, Ext., D&C, No. 1, cns lb.16.10 - —
Red, Ext., D&C, No. 1, cns lb.13.50 - —
Yellow, Ext., D&C, No. 1, cns lb.10.95 - —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

20 Chrysoidine Y, dustless lb. .81 - —
27 Fast light orange 2G lb. .99 - —
31 Phloxine 2G lb. .81 - —
36 Yellow 2G lb. .91 - —
40 Orange R extra, conc lb. 1.17 - —
57 Fuchsine 6B lb. 1.19 - —
79 Scarlet 2R lb. .89 - —
151 Orange AD lb. .61 - —
161 Orange RR lb. .73 - —
176 Fast red A lb. 1.07 - —
179 Rubine XX, conc lb. 1.14 - —
180 Blue F4B lb. 1.01 - —
185 Brilliant scarlet 3RN, conc. lb. .93 - —
202 Chrome blue black R, conc. lb. .83 - —
203 Chrome black T lb. .86 - —
208 Fast blue SR lb. 1.00 - —
216 Chrome red B lb. .84 - —
234 Brown Y lb. .98 - —
246 Blue black, extra, conc lb. 1.05 - —
275 Milling red 3R, conc lb. 2.03 - —
289 Navy blue 3R, conc lb. 1.31 - —
299 Black F, conc lb. 1.69 - —
304 Neutral black 2B, conc. lb. 2.21 - —
326 Fast scarlet 4BNC lb. 1.64 - —
332 Bismark brown RX, conc. lb. 1.05 - —
365 Brilliant yellow, conc lb. 2.83 - —
382 Scarlet B lb. 2.00 - —
401 Diazo black BHD lb. .72 - —
406 Blue 2B, extra conc lb. 1.18 - —
419 Red FC, conc lb. 1.12 - —
420 Brown M lb. 1.08 - —
448 Red 4BX, conc lb. 1.30 - —
518 Diamine sky blue FF, extra, conc lb. 1.50 - —
561 Brown B lb. 2.23 - —
581 Black EB, 200% lb. 1.03 - —
593 Green BY, conc lb. .79 - —
596 Yellow Brown K, extra lb. .98 - —
620 Yellow 2G lb. 1.79 - —
640 Yellow XX lb. 1.77 - —
655 Yellow OX lb. 2.04 - —
657 Green V lb. 2.10 - —
662 Brilliant green G lb. 2.79 - —
667 Brilliant milling green 6B, conc lb. 3.68 - —
671 Blue EG lb. 1.70 - —
681 Crystal violet powder lb. 2.15 - —
698 Violet 4BXN lb. 1.74 - —
720 Brilliant blue BBG lb. 1.88 - —
729 Blue B, conc lb. 2.79 - —
749 Red BX lb. 4.33 - —
814 Yellow NN, conc lb. 3.11 - —
841 Safranine GF, extra, conc. lb. 3.17 - —
865 Nigrosine WSJ lb. .79 - —
922 Blue GXX lb. 1.71 - —
978 Black GXCF, conc lb. .32 - —
1034 Alizarine red SC lb. 2.59 - —
1054 Alizarine blue SAPX lb. 2.91 - —
1078 Alizarine green CG, extra. lb. 2.72 - —
1085 Alizarine blue, black, B lb. 2.33 - —
1076 Golden orange GFD, single paste lb. 1.99 - —
1099 Dark blue BO, single paste. lb. 1.75 - —


N(CH3)2
N,N-Dimethylaniline*
A colorless to light-yellow oil, soluble in most organic solvents—but practically insoluble in water. May contain as much as 0.25% N-methylaniline as impurity.
Specification:
Freezing Point: 2.1°C., minimum, dry basis.
NHC2H5
N-Ethylaniline*
A clear yellow-brown oil, infinitely soluble in alcohol and ether, practically insoluble in water. May contain up to 0.5% and 2.5% N,N-diethylaniline as impurities.
Specifications:
Purity: 97.0% minimum. Distillation ranges: Distills 5 to 95 cc. within 1.0°C., including temp. 205.0°C., corrected to 760 mm.
N(C2H5)2
N,N-Diethylcyclohexylamine*
A clear, colorless liquid, soluble in ether and benzene. Slightly soluble in water. Traces of cyclohexanone and N-ethylcyclohexylamine may be present as impurities.
Specifications:
Purity: 98.5% minimum. Moisture Content: 0.1% maximum. Distillation Ranges: Distills 5 to 95 cc. within 2.0°C., including temp. 194.5°C., corrected to 760 mm.
NHCH3
N-Methylaniline*
A colorless to light-amber oil, soluble in dilute hydrochloric acid. It contains up to 4.0% N,N-dimethylaniline and 1.0% aniline as impurities.
Specifications:
Purity: 95.0% minimum by total nitrite absorption, corrected for aniline and N,N-dimethylaniline content.
Ready to work for you as solvents, acid acceptors, intermediates
DU PONT CYCLIC AMINES
NHCH3
N-Methylcyclohexylamine*
is a strongly basic secondary amine, soluble in both alcohol and ether but only slightly soluble in water. It is a water-white liquid with a specific gravity of 0.86 at 20° C. Traces of cyclohexylamine and N,N-dimethylcyclohexylamine may be present.
SPECIFICATIONS: Purity: 99.0% minimum. Methylaniline Content: 0.3% maximum. Distillation Range: Distills 5 to 95 cc. within 2.0°C., including 149°C., corrected to 760 mm.
A REQUEST ON YOUR LETTERHEAD
will bring full information about these promising cyclic amines, and alkylated anilines. Just write: E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Chemicals Div., Wilmington 98, Delaware.
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*These compounds sold in technical grade.
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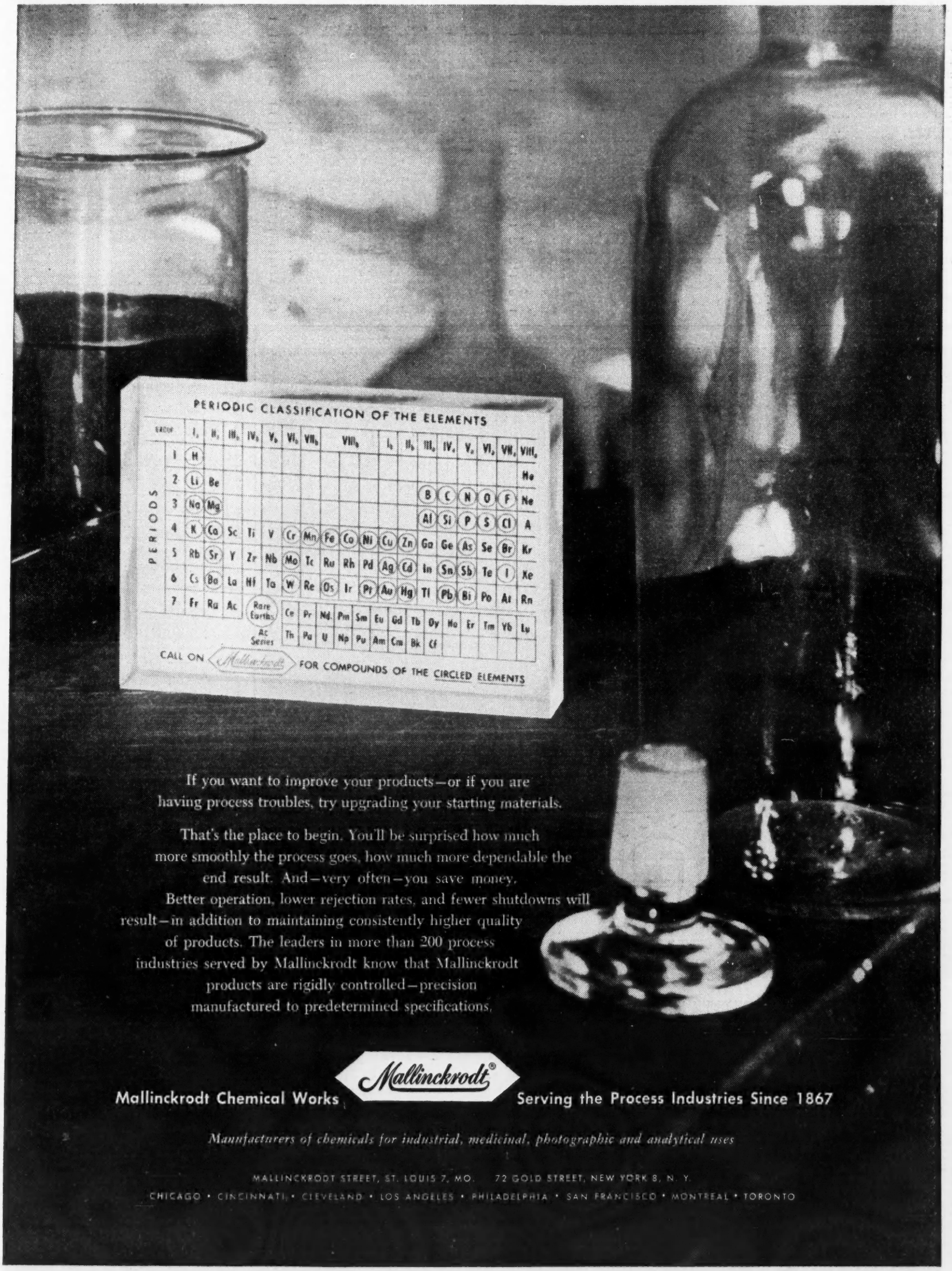
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CALL ON Mallinckrodt FOR COMPOUNDS OF THE CIRCLED ELEMENTS
If you want to improve your products—or if you are having process troubles, try upgrading your starting materials.
That's the place to begin. You'll be surprised how much more smoothly the process goes, how much more dependable the end result. And—very often—you save money.
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Dyes, Coaltar—Ferric-Sodium Oxalate

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd., No.
1101 Jade green N, double paste, lb. 1.98 • —
1106 Blue RS, double paste lb. 3.26 • —
1217 Orange RD, single paste lb. 1.65 • —
1113 Blue BLFD, double paste lb. 2.48 • —
1150 Olive R, single paste lb. 1.10 • —
1151 Brown R, single paste lb. 1.76 • —
1171 Indigo synthetic, 20% paste, lb. .31 • —
p-4 Brown PG lb. 2.30 • —
p-14 Brown EB lb. 1.66 • —
p-24 Gray L lb. 1.60 • —
p-80 Diazo brilliant scarlet ROAD lb. 2.79 • —
p-202 Diazo black VJ, conc lb. 1.91 • —
p-244 Brilliant scarlet BN lb. 1.31 • —
p-313 Naphthol SWF lb. 2.42 • —

Dyes, coaltar, for stains, oil-soluble, 100-lb dms., sellers' works
Black blue No. 550 lb. .81 • —
Jet No 551 lb. .89 • —
Brown R, conc lb. 1.72 • —
Orange R, brilliant lb. .90 • —
Red 4B, conc lb. 1.37 • —
Yellow C lb. 1.18 • —
FN, conc lb. 1.22 • —

Dyes, coaltar, for stains, spirit-soluble 100-lb. dms., sellers' works:—
Auramine O lb. 1.85 • —
Black, basic blue lb. 1.21 • —
Jet lb. 1.21 • —
Blue, methylene, 2B, conc lb. 1.71 • —
Brown Bismarck R, conc lb. .86 • —

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Chrysoidine, R, extra lb. .60 • —
Y, extra lb. .84 • —
Fuchsine, conc lb. 3.08 • —
Green, malachite, conc lb. 2.10 • —
Rhodamine, B lb. 4.33 • —
Safranine, Y, conc lb. 2.90 • —
Violet, methyl, B lb. 1.10 • —

Dyes, coaltar, for stains, water-soluble, 100-lb. dms., sellers' works:—
Azo rubine R, extra, conc lb. 1.04 • —
Black, acid blue, B, extra lb. .86 • —
Fast light, 3 G, extra lb. 2.04 • —
Methanil, conc lb. .91 • —
Orange acid, Y, conc lb. .47 • —
Scarlet croceine, MOO lb. 1.45 • —
Yellow, azo, conc lb. .90 • —
Oil-soluble, spirit-soluble, water-soluble in kegs, 3c. higher; tins. 10c. higher.

E

Echinacea root, bls lb. 1.10 • —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls lb. 1.09 • 1.13
tanners, bbls. lb. .06 • .06½
Elm bark, grinding, bls lb. .30 • .32
powd., bbls., bxs lb. .45 • —
select, bundles lb. .75 • —
Emetine hydrochloride, USP, bots oz. 42.50 • 44.00
Endrin, tech., dms., dlvd., 100% basis lb. 3.75 • —
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots oz. .98 • 1.00
hydrous, bots., 100-oz. lots oz. .92 • —
Hydrochloride, tins, 100-oz. lots, oz. .75 • —
Sulfate, cryst., tins, 100-oz. lots, oz. .72 • —
powd., tins, 100-oz. lots oz. .73 • —
Epichlorohydrin, dms., c.l., dlvd lb. .35 • —
l.c.l., dlvd lb. .36 • —
tanks, dlvd lb. .33 • —
Epinephrine, syn., USP, bots., 100-gram lots gram. .45 • .55
Epsom salt (see Magnesium sulfate).
Ergosterol, unirradiated, crvst kilo. 150 00 • —
Ergot, NF, dms., tin-lined lb. 3.00 • —
Eserine salicylate, bots oz. 84.00 • —
Sulfate, bots oz. 84.00 • —
Ether (see specific product).
Ethyl acetate, nat. ferment., 85-88%, dms., c.l., frt. alld lb. .13 • —
l.c.l., frt. alld lb. .14 • —
tanks, frt. alld lb. .11 • —
95-98%, dms., c.l., frt. alld, lb. .13¼- —
l.c.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .11¼- —
99%, dms., c.l., frt. alld lb. .13½- —
l.c.l., frt. alld lb. .14½- —
tanks, frt. alld lb. .11½- —
syn., 85-88%, dms., c.l., dlvd lb. .13 • —
l.c.l., dlvd lb. .14 • —
tanks, dlvd lb. .11 • —
95-98%, dms., c.l., dlvd lb. .13¼- —
l.c.l., dlvd lb. .14¼- —
tanks, dlvd lb. .11¼- —
99%, dms., c.l., dlvd lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
Acetoacetate, dms., c.l., dlvd lb. .58 • —
l.c.l. dlvd lb. .59 • —
tanks, dlvd lb. .56 • —
Ethyl acrylate, dms., c.l., t.l., dlvd, lb. .36 • —
l.t.l., dlvd lb. .37 • —
tanks, dlvd lb. .34 • —
Aminobenzoate, USP (see Benzocaine).
Bromide, tech., 98%, dms., c.l., frt. alld. E lb. .41 • .43
l.c.l., frt. alld. E lb. .43 • .45
Butyrate, works lb .80 • 1.02
Carbamate (see Urethane).
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 • —
smaller tots, works lb. .72 • .80
vis., 10, 20, 50, 100, 150 cps., ogs., 2,000-lb. lots or more, works lb. .65 • .70
smaller lots, works lb .67 • .81
Chloride, tech., cyl., works lb. .20 • .22
dms., works lb. .18 • .20
tanks, works lb. .10 • —
Butyl ketone, dms., c.l., works lb. .35½- —
l.c.l., works lb. .36 • —
tanks, works lb. .34 • —
Cinnamate, cns lb. 2.71 3.45
Ethanolamines, mixed, dms., c.l., frt. alld, E. Miss lb. .42½- —
l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40½- —
indust., dms., c.l., dlvd. E lb. .12 • —
l.c.l., dlvd. E lb. .13 • —
tanks, dlvd. E lb. .10 • —
Ether, absolute, ACS, dms lb. .27 • —
anesthesia, USP, hospitals, 1-lb. cns lb. .89 • —
½-lb. cns lb. .37 • —
¼-lb cns lb. 1.05 • —
indust., c.l., dlvd. E lb. .12 • —
t.c.l., dlvd. E. lb. .13 • —
tanks, dlvd. E. lb. .10 • —
Gallate, dms., 100 to 2,000-lb. lots, lb. 3.90 • 4.40
Iodide, cbys., works lb. 3.30 • —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald. lb. .51½- .52
Morphine hydrochloride, USP, bots oz. 11.85 • —
Nitrite (see Nitrous ether).
Oenanthate, dms. lb. 1.00 • 1.50
Oleate, dms., l.c.l., works lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethylorthosilicate).
40% available SiO_2, dms., c.l., dlvd. lb. .49 • —
l.c.l., dlvd lb. .50 • —
tanks, dlvd lb. .47 • —
N-Ethyl-a-naphthylamine, dms., works, lb. 1.02 • —
N-Ethyl-o-toluidine, bbls lb. .88 • —
Ethylamine (see Mono, Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld, lb. .51 • —
l.c.l., frt. alld lb. .52 • —
tanks, frt. alld lb. .50 • —
Ethylbenzene, 99%, dms., c.l. lb. .19½- .20¼
l.c.l. lb. .20½- .21¼
tanks lb. .18½- —
Ethylene dichloride, dms., c.l., dlvd, lb. .10¼- —
l.c.l., same basis lb. .12¼- —
tanks, same basis lb. .09 • —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Glycol, indust., dms., c.l., dlvd. E, lb. .15½- —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E lb. .20½- —
l.c.l., dlvd. E lb. .21½- —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tanks, dlvd. E lb. .16½- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20½- —
l.c.l., dlvd. E lb. .21½- —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E, lb. .28¾- —
l.c.l., dlvd. E lb. .29¼- —
tanks, dlvd. E lb. .27 • —
Monostearate, tripie pressed, dms lb. .34 • —
Oxide, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .46 • —
l.c.l., dlvd. E., 100% basis lb. .47 • —
tanks, dlvd. E., 100% basis lb. .44 • —
Ethylvanillin, cns., 25-lb. lots lb. 6.75 • 7.30
smaller lots lb. 7.35 • 7.40
Eucalyptol, USP, cns., dms lb. 1.40 • 1.50
Eugenol, USP, bots. lb. 2.20 • 3.25
Euphorbia herb, bls lb. .15 • .17

F

Feldspar, 140-200 mesh, bulk, c.l., works ton. 18 50 • —
Feldspar in bags $3 per ton higher.
Fennel seed, Argentine, bgs lb. .17 • —
Czech, medium, bgs lb. .09½- —
Indian, light, bgs lb. .12 • .12½
Roumanian, bgs. lb. .09½- —
Fenugreek seed, Indian, bgs lb. .08½- .09
Moroccan, bgs. lb. .08½- .09
Ferric acetate, liquor, 28°, bbls., c.l., works lb. .09 • —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys lb. .16 • —
djns. lb. .17 • —
Cacodylate, NF, bots lb. 13.00 • 14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 • —
l.c.l., works 100 lbs. 7.85 • —
indust., cryst., bbls., c.l., works, 100 lbs. 5.25 • 6.75
l.c.l., works 100 lbs. 5.75 • 7.25
42° Be, photo grade, cbys., c.l., works 100 lbs. 7.25 • 8.25
sewage grade, tanks, frt. equald, 100% basis, 100 lbs. 3.50 • —
USP, cryst., dms., works lb. .07¼- .09
Citrate, gran., dms. lb. .86 • —
Hydrophosphite, NF, dms lb. 3.45 • —
Ferric naphthenate liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate, gran., dms. lb. .85 • .87
Phosphate, NF, soluble, gran., pearls, cs lb. .64 • .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms lb. .78 • .81
Resinate, 6¾% Fe, dms., frt. alld lb. .29½- —
Stearate, dms., c.l., frt. alld lb. .37 • —
l.c.l., frt. alld lb. .38 • .42
Sulfate, partially hydrated, bgs., c.l., works ton. 31.75 -33.75
l.c.l., works ton. 34.75 -40.75
lb. .37 • —
Ferric-ammonium citrate, brown, NF, gran., dms lb. .56 • .59
green, USP XII, gran., dms lb. .56 • .59
Oxalate, fine gran., dms lb. .25½- .28¼
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33¼
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28¼

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Ferrous gluconate, NF, dms lb. .88 - —
Sulfate, gran., bgs., c.l., works. ton.34.50 - —
l.c.l., dlvd. Metropolitan area..100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP cryst., bbls., dms. lb 09½- .10
Fir balsam, Canada, cns. gal.32.00 - —
Oregon, bbls gal. 4.00 - —
Fishliver oil (see Oil fishliver).
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton. No Stocks
Fishscrap, menhaden, dried, 60% protein, bgs., Balto area ton. No Stocks
Fleaseed (see Psyllium seed)
Formaldehyde, NF, 37%, (inhibited), methanol, Zone 1, dms., c.l., dlvd lb. .0675- —
l.c.l., works lb. .072 - .0725
tanks, dlvd lb. .04 - —
Zone 2, 12-15%, methanol, dms., c.l., dlvd lb. .071 - —
tanks, dlvd lb. .043 - —
Methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .0375- —
Zone 2, tanks, dlvd lb. .04 - —
Fringetree bark, bls lb. .60 .61
Fullers' earth, bgs., c.l., Ill. mines, ton.19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton.17.50 - —
calcined, bgs., c.l., same basis ton.20.00 -21 75
oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton.16.50 -17.00
200-mesh, bgs., c.l., same basis ton.17.50 -18.00
spent, bgs., c.l., shipt. point ton. 4.50 - 5.00
Furfural, dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
dlvd. W lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .20 - —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., l.c.l lb. .45½- —
No 3, bbls l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls lb. .21½- —
No. 3, bbls. l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

G

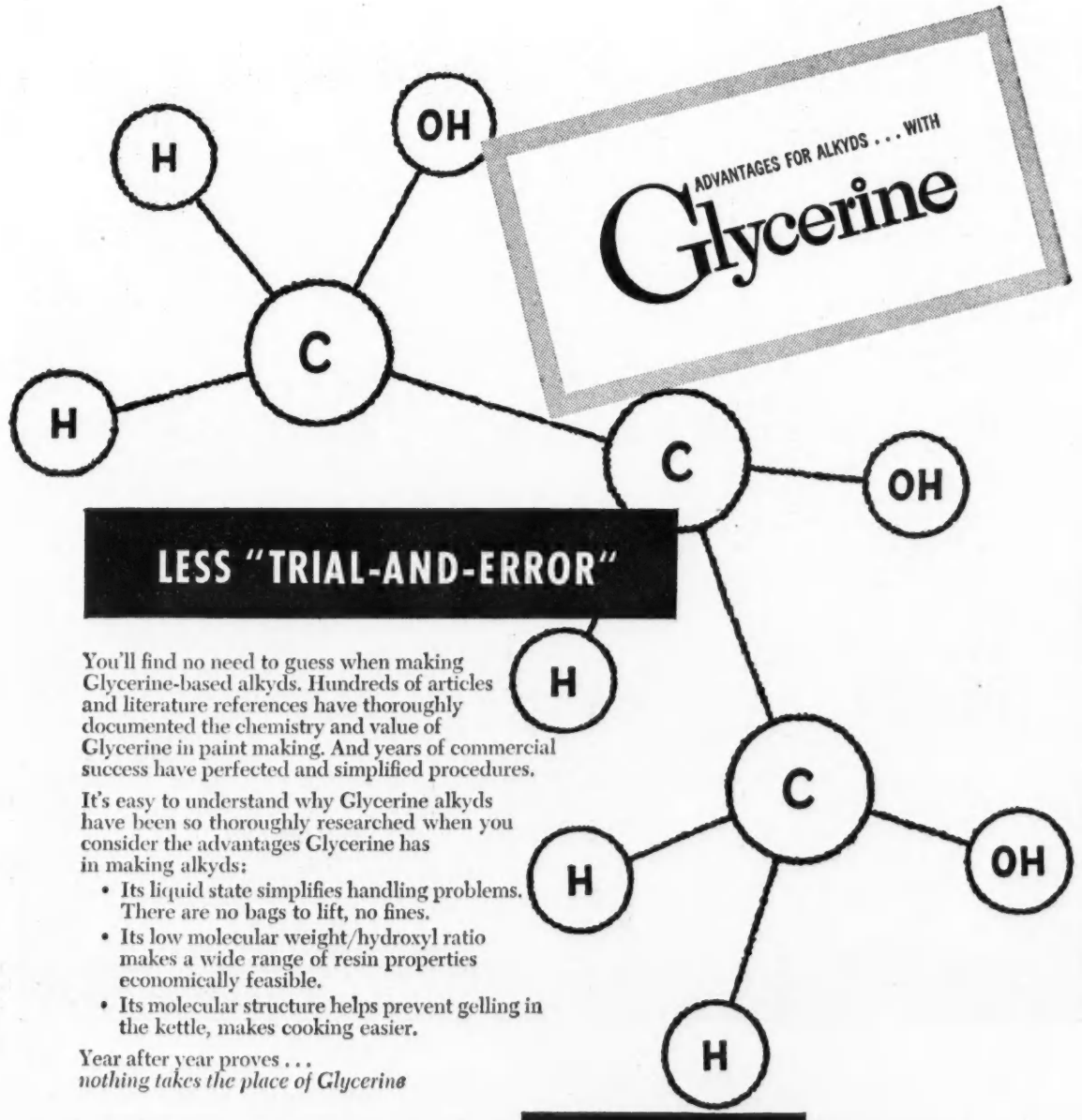
G salt, bbls., frt. alld, 100% basis lb. .73 - —
Gammapicoline (see g-Picoline).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbl., c.l. lb. .53 - —
150 Bloom test, bbl., c.l. lb. .64 - —
200 Bloom test, bbl., c.l. lb. .71 - —
225 Bloom test, bbl., c.l. lb. .74 - —
275 Bloom test, bbl., c.l. lb. .81 - —
Gelsemium root, bls lb. .23 - .24
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd. bbls. bxs lb. .23 - .24
Geraniol, extra, cns., dms. lb. 4.50 - 4.80
standard, cns., dms. lb. 4.20 - —
Geranyl acetate, cns lb. 3.90 - —
Ginger oleoresin, NF, from African root, bots lb. 4.00 - 7.75
from Jamaican root, bots lb. 6.00 -10 25
Root, African, bls. lb. .36 - .37
Cochin, bgs. lb. .38 - —
Jamaican, No. 2, bgs. lb. .54 - —
No. 3, bgs lb. .52 - —
Nigerian, split, bgs. lb. .35 - —
Glauber's salt, anhyd (see Sodium sulfate).
Glue, bone, extracted, 86 jellygrams, bgs., c.l., dlvd lb. .13 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
packers 40 jellygrams, bgs., c.l., dlvd lb. .14 - —
65 jellygrams, same basis lb. .14½- —
86 jellygrams, same basis lb. .15 - —
115 jellygrams, same basis lb. .15½- —
135 jellygrams, same basis lb. .18½- —
164 jellygrams, same basis lb. .19½- —
renderers' 113 jellygrams, bgs., c.l., dlvd lb. .13 - —
Bone glue, l.c.l., prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .13 - —
95-121, bgs., c.l., dlvd lb. .16 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
178-206 bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .39 - —
461-494, bgs., c.l. dlvd lb. .40 - —
495-529, bgs., c.l., dlvd lb. .41 - —
Hide glue l.c.l. prices 1c. higher.
Glycerine, nat., crude, saponification, 88%, to refineries, tanks, lb. .22 Nom.
soaplye, 80%, tanks lb. .20 Nom.
refd., BP, 98%, dms., c.l., dlvd. lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
dynamite, dms., c.l., dlvd lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
high gravity, dms., c.l., dlvd. lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
USP, CP, 95%, dms., c.l., dlvd. lb. .29½- —
l.c.l., dlvd lb. .30 - —
tanks, dlvd lb. .29 - —
yellow, dist., dms., c.l., dlvd. lb. .30 - —
l.c.l., dlvd lb. .30½- —
syn., dms., c.l., dlvd lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works lb. .18½- —
l.c.l., works lb. .19 - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.25 - 2.50
powd., bxs lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95%, bgs., fib. dms., ex whse lb. .29 - .31

Grease, white, choice, all hog, tanks, dlvd lb. .09¼- .09½
not all hog, tanks, dlvd lb. .08¾- .09
yellow, tanks, dlvd lb. .07⅞- .07½
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb. 5.10 - —
tungstated, PTMA, kgs., works, lb. 6.20 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd, N. of Penn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .38 - —
16-30%, bbls., same basis lb. .39 - —
31-45%, bbls. same basis, lb .40 - —
45-49%, bbls., same basis lb. .43 - —
50%, bbls. same basis lb. .48 - —
reduced color, 25%, bbls., same basis lb. .19 - —
Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn. Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd Pac coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld lb. .39¾- —
l.c.l., same basis lb. .40¼- —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 4.60 - —
Paris (see Paris green).

Green, phthalocyanine toner, bbls., works lb. 3.95 - —
resinated, bbls lb 3.50 - —
water dispersable, bbls lb 1.71 - —
Pigment B, kegs lb. 1.35 - —
paste, kegs lb. .38 - —
Grindelia robusta herb, bls lb. .38 .40
Guaiacol, NF, cryst., dms., tins lb 2.10 2.15
liq., cbys., dms lb 2.30 2.40
Carbonate, NF VII, dms lb 3.40 3.45
Gum aloe (see Aloe)
Arabic amber sorts, bgs lb. .22 - .23
powd., USP, bbls lb. .27 - .28
Asafetida (see A).
Asphaltum (see A).
Benzoin Sumatra, cs lb .38 - .42
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —
Copal, Congo, No. 1, bgs lb. .23 - —
No. 2, bgs lb. .18½ .20
No. 3, bgs lb. .16½ 18
Manila C, bgs lb. .42 .44
CBB, bgs lb. .37 Nom.
DBB bgs lb. .33 - .35
DK, bgs lb. No Stocks
dust, bgs lb. 14 .16
MA, soft, bgs lb. .23 .25
WS, bgs lb. .34 .36
Philippine pale, chips, bgs lb. .24 - .26
nubs, bgs lb. .34 - .36
seeds, bgs lb. .20 - .22
sorts, bgs lb. .22 - —
Pontianak, chips, bgs lb. .28 - —
nubs bgs lb. .39 .40
Dammar, Batavia, A/E, cs lb. .27 - .29
dust, bgs lb. .16½ 17½
E, bgs lb. .20 .22

Ferrous Gluconate—Gum, Tragacanth

Gum, dammar, East India, batu, bold, bgs lb. .14 - .15½
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs lb. .11 - .13
nubs and chips, bgs lb. .11 - .13
pale chips, bgs lb. .13½- .14½
nubs, bgs lb. .18 - .20
Siam, cs lb. .37 - —
Singapore, No. 1, bgs lb. .44 - .46
No. 2, bbl lb. .27 .29
No. 3, bbls lb. No stocks.
dust, bgs lb. .16½- .17
seeds, bgs lb. .20 - .22
Ester, gum-rosin type dms., c.l., dlvd. Ill. Ind., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St Louis, St. Paul, Va., W. Va lb. .14½- .16
wood-rosin type dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs., l.c.l. lb. .40 - .50
tech. grade, bgs., c.l lb. .32 - —
Karaya, No. 1, NF, powd., bbls. lb. .53 - —
No. 2, powd., bbls. lb. 45 - —
No 3, powd., bbls lb. .40 - —
Locust bean, powd., bgs lb. 28 - .30
Myrrh, cs. lb. .38 .40
Opium (see O)
Olibanum siftings, cs lb. .15 - .20
tears, cs lb 22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs lb. 3.00 - 3.50
No. 2, cs lb 2.55 2.60
No. 3, cs lb 1.75 1.80
powd., USP, bbls lb. 1.25 - 1.35



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You'll find no need to guess when making Glycerine-based alkyds. Hundreds of articles and literature references have thoroughly documented the chemistry and value of Glycerine in paint making. And years of commercial success have perfected and simplified procedures.

It's easy to understand why Glycerine alkyds have been so thoroughly researched when you consider the advantages Glycerine has in making alkyds:

- Its liquid state simplifies handling problems. There are no bags to lift, no fines.
- Its low molecular weight/hydroxyl ratio makes a wide range of resin properties economically feasible.
- Its molecular structure helps prevent gelling in the kettle, makes cooking easier.

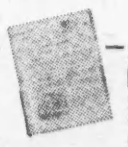
Year after year proves . . .
nothing takes the place of Glycerine

This balanced group of properties keeps Glycerine's usefulness growing

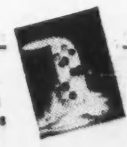
HYGROSCOPICITY • STABILITY • SOLVENT POWER • VISCOSITY • NONVOLATILITY • NONTOXICITY • TASTE • MW/HYDROXYL RATIO • HUMECTANT • CARRIER • SOLVENT • LUBRICANT • SOFTENER • EMOLLIENT • ANTI-FREEZE • ALKYD BASE •

☑ CHECK AND SEND FOR TECHNICAL DATA

☐ 20-page booklet, "Glycerine Alkyds Tailored to Need"



☐ 12-page booklet on Glycerine standards and specifications



☐ 16-page booklet on Glycerine properties and applications

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Gypsum, plaster of paris, 100-lb. paper, bgs. trucks, dlvd. N. Y. C. ton 20.30 - —
terra alba, dom., paper bgs., same basis ton 19.00 - —
works, N. Y. C. ton 16.00 - —
imp. English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse ton 60.00 -62.00

H

Hawthorn berries, bgs. lb. .28 - .32
Heliotropin, cryst., cns lb. 4.10 - 4.50
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l. lb. .47 - —
No. 2, bbls., l.c.l. lb. .43 - —
No. 3, bbls., l.c.l. lb. .41 - —
No. 4, bbls., l.c.l. lb. .39 - —
No. 5, bbls., l.c.l. lb. .37 - —
paste No. 1, bbls., l.c.l. lb .20½- —
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J. gal. .19 - —
Baytown, Tex. gal. .14¾- —
Borger, Tex. gal. .14¾- —
Hesperidin methylphalcone, bots., works lb 50.00 - —
Hexachlorophene, dms lb 2.60 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb. lots, same basis lb. .232 - —
smaller lots, same basis lb. .242 - —
Hexamethylenetetramine, tech., fib. dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500-lb. lots or more, same basis lb. .40½- —
smaller lots, same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J. gal. .19 - —
Baytown, Tex. gal. .15½- —
Borger, Tex. gal. .15½- —
1-Hexanol, dms., c.l., works lb. .34½- —
l.c.l., works lb. .35 - —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
Salicylate, dms lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .14 - —
n-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd lb 4.50 - —
Histamine diphosphate, USP, bots. kilo 400.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works, kilo 80.00 - 85.00
1-5 kilo lots, works kilo 90.00 - 95.00
Homatropine hydrobromide, USP, bots oz. 8.50 - —
Methylbromide, USP, bots oz. 5.65 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb. .16 - .19
Hydrastine, bots oz. 29.50 -31.00
Hydrochloride, NF, bots oz. 29.50 -31.00
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., Lake Charles, La. lb. 3.00 - 3.30
85%, ret. dms., same basis lb. 1.35 - 1.55
Hydrate, 100%, ret. dms., Lake Charles, La. lb. 1.60 - 1.90
Hydrocortisone acetate, bulk, bots., dms. gram 4.75 - 5.00
Alcohol, bulk, bots., dms. gram 4.75 - 5.00
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E. lb. .30½- .32½
dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1600- —
Hydroquinone, photo grade, bbls., dms. lb. .98 - 1.00
tech., dms., c.l., dlvd lb. .77½- —
l.c.l. same basis lb. .79½- —
Hydroxycitronellal, cns lb. 7.65 - 7.90
Hyoscine salts (see Scopolamine).
Hyoscyamine, bots oz. 15.75 -16.00
Hydrobromide, bots oz. 11.00 -12.00
Sulfate, bots oz. 10.50 -11.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 - —
liq., No. 1, bbls., l.c.l. lb. .35 - —
No. 2, bbls., l.c.l. lb. .27 - —

I

Ichthammol, NF, dms lb. .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb. 17.00 -21.00
Inositol, bots., dlvd lb. 5.00 - —
oms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.45 - —
resub, USP, dms., jars lb. 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 - —
Iodoform, NF, dms., kgs lb. 4.90 - 5.00
a-Ionone, cns lb. 5.10 - 5.85
b-Ionone, cs. lb. 6.00 - 7.70
Methyl (see under M).
Ipecac root, bgs lb. 8.50 - 9.00
powd., bbls., bxs lb. 10.00 -10.25
Irish moss, bleached, prime, bls lb. .30 - .35
Iron compounds (see Ferric or Ferrous).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .62 - .95
Formate, dms lb. .80 - —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
l.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. .19½- —
Isoeugenol, cns. lb. 4.40 - 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23.00 -25.50
smaller lots kilo 24.00 -26.00
Isopentane, comi. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
l.c.l., works lb. .24¾- —
tanks, works lb .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .12 - —
l.c.l., same basis lb. .13 - —
tanks, same basis lb. .10 - —
Alcohol (see Alcohol, isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l., dlvd lb. .08 - —
tanks, dlvd lb .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 - —
l.c.l., works lb. .714 - .814
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works. lb. .75 - —
l.c.l., works lb. .80 - .90
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works lb. .65 - 1.25

J

Jalap root, NF, bls lb. .45 - .55
powd., bbls., bxs lb. .55 - .65
Juniper berries, bgs lb. .18 - .20
Tar, NF, dms lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd., fib. dms. lb. .10 - .12
colloidal, fib., dms. lb. .15½- .17¼
Kola nuts, bgs lb. .15 - —

L

Lactose, crude, bgs., c.l., works lb. .15 - .15½
edible, fib. dms., 30,000-lb. lots, works lb. .22 - —
2,000-lb. lots, works lb. .22¾- —
200-1,800-lb. lots, works lb. .23¼- —
Edible lactose in bgs. 1c. lower.
fermentation grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, works lb. .24 - —
2,000-lb. lots, works lb. .24¾- —
200-1,800-lb. lots, works lb. .25¼- —
USP lactose in bgs. 1c. lower.
Lady's slipper root, bls lb. 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .28 - .30
USP, anhyd., dms., works lb. .26 - .28
hydrous, dms., works lb. .25 - .27
Lard, cash, dms., Chicago lb. .1095- —
Larkspur seed, bgs lb. .20 - .23
Laurel leaves, Greek, bls. lb. .12 - —
Portuguese, bls. lb. .11 - —
Turkey, bls. lb. .24 - .25
Yugoslavia, bls. lb. .11 - —
n-Lauryl methacrylate, dms., c.l. or t.l., works lb. .65½- —
Lavender flowers, medium, bls lb. .55 - .60
ord., bls lb. .16 - .20
select., bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .22 - —
gran., bbls lb. .23 - —
powd., bbls lb. .23 - —
NF, cryst., gran., powd. lb. .31 - .32
Arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic, sulfate, bbls., c.l., shipt. point, frt. alld. lb. .16¼- —
l.c.l., same basis lb. .17¼- —
Carbonate (see Lead, white, basic Carbonate).
Chloride, dms. lb. .43 - —
Iodide, NF, V jars lb. 5.82 - —
Linoleate, fused, 26%% Pb, dms. lb. .33 - —
Metal pigs, prime, N. Y. lb. .15½- —
St. Louis lb. .1530- —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis, lb. .35¾- —
Prices ex wnse. Jersey City, N. J. 4½c. per lb. higher
Monosilicate, bgs., c.l., works, frt. equald lb. .1620- —
l.c.l., same basis lb. .1670- —
Naphthenate, liq., 16% Pb, dms., dlvd lb. .17 - —
24% Pb., dms., dlvd lb. .21 - —
solid, 37% Pb., dms., dlvd lb. .27½- —
Nitrate, bbls. lb. .22¼- —
Orthosilicate-silica gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Peroxide, tech., powd., bbls lb. .38¾- .43¼
Phthalate, dibasic, dms., works lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld. lb. .18 - —
l.c.l., same basis lb. .18½- —
97% Pb_3O_4, bbls., c.l., same basis lb. .18¼- —
l.c.l., same basis lb. .18¾- —
98% Pb_3O_4, bbls., cl., same basis, lb. .18½- —
l.c.l., same basis lb. .19 - —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½- —
Salicylate, normal, dms., works lb. .46 - —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).

You need both ingredients
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KETONE LACQUER SOLVENTS
give complete flexibility in formulating,
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Ketone-based solvent systems are inherently superior for lacquer formulations because of their high solvency for both nitrocellulose and vinyl resins.

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Lead tallate, liq., 16% Pb., dms lb. .15 - —
24% Pb., dms lb. .18½ - —
solid, 30% lb. .23¼ - —
White, basic carbonate, bgs., c.l., shipt. point, frt .alld lb. .17½ - .18
l.c.l., same basis lb. .18½ - .19
silicate, bgs., c.l., shipt. point, frt. alld lb. .16¼ - .19
l.c.l., same basis lb. .17¼ - .20
sulfate, bgs., c.l., shipt. point, frt. alld lb. .16¼ - —
l.c.l. same basis lb. .17¼ - —
Lecithin, edible, tech., bleached, non-ret, dms., c.l., works lb. .15 - .17
l.c.l., same basis lb. .15½ - .17½
unbleached, non-ret, dms., c.l., same basis lb. .13 - .15
l.c.l., same basis lb. .14½ - .16½
dl-Leucine, dms., works lb. 12.25 - 15.00
Licorice root, whole, bbls lb. .10 - .12
gran., bbls lb. .15 - .17
powd., bbls lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½ - —
l.c.l., works lb. .06¾ - —
Lime, chemical (quicklime), bulk, c.l., metropolitan, N. Y. destination, freight equalized with nearest producing point ton. 18.71 - —
Hydrated bulk, c.l., same basis. ton. 20.21 - —
Spray, bgs., c.l., same basis ton. 23.21 - —
Lime salts (see Calcium)
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 6.20 - 8.00
ex lignaloe wood oil, dms lb. 5.30 - 7.10
Linalyl acetate ex bois de rose, 90-92% dms lb. 6.15 - 7.95
96-98% dms lb. 6.75 - 7.15
ex petitgrain, bots. lb. 5.95 - 6.70
Lindane, 25% formulation, dealers, dms., works lb. 1.58 - —
99%, tech. dealers dms., dlvd., lb. 3.10 - —
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls lb. .35 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills ton. 61.50 -62.00
extracted 36% bulk, same basis. ton. 65.00 Nom.
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .17 - —
l.c.l., same basis lb. .17½ - —
Lithium benzoate, dms lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald lb. 2.30 - —
Carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½ - —
ton lots to t.l., dlvd lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works lb. .85 - 1.12½
l.c.l., same basis lb. .90 - 1.13½
Chloride CP, anhyd., ton lots lb. 1.28½ - —
tech., cryst., dms., c.l., t.l., dlvd., tech., cryst., dms., c.l., t.l., dlvd. or works, frt. alld. lb. 1.05 - 1.10½
l.c.l., same basis lb. 1.10 - 1.25
Citrate, NF, dms lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots., dlvd. lb. 2.17½ - —
ton lots, dlvd lb. 2.18½ - —
less ton lots, dlvd lb. 2.23½ - —
Hydride powd., dms., works lb. 14.00 - —
Hydroxide, monohydrate, dms., c.l., t.l., dlvd, or works, frt. alld. lb. .90 - .90½
l.c.l., same basis lb. .91½ - .96
Manganite, dms., works lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots. lb. 1.25 - —
Salicylate dms lb. 1.60 - 1.70
Silicate, dms., works lb. 1.10 - 1.30
Sulfate, dms., c.l., works lb. .47½ - —
ton lots, works lb. .48½ - —
less-ton lots, works lb. .53½ - —
Sulfate, dms., 100-lb. lots lb. 1.05 - 1.45
Titanate dms., works lb. 1.15 - 1.35

Lithopone, ord., bgs., c.l., dlvd lb. .07½ - —
l.c.l., dlvd. lb. .08¼ - .08½
titanated (high-strength), bgs., c.l., dlvd lb. .10 - —
l.c.l. dlvd lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.

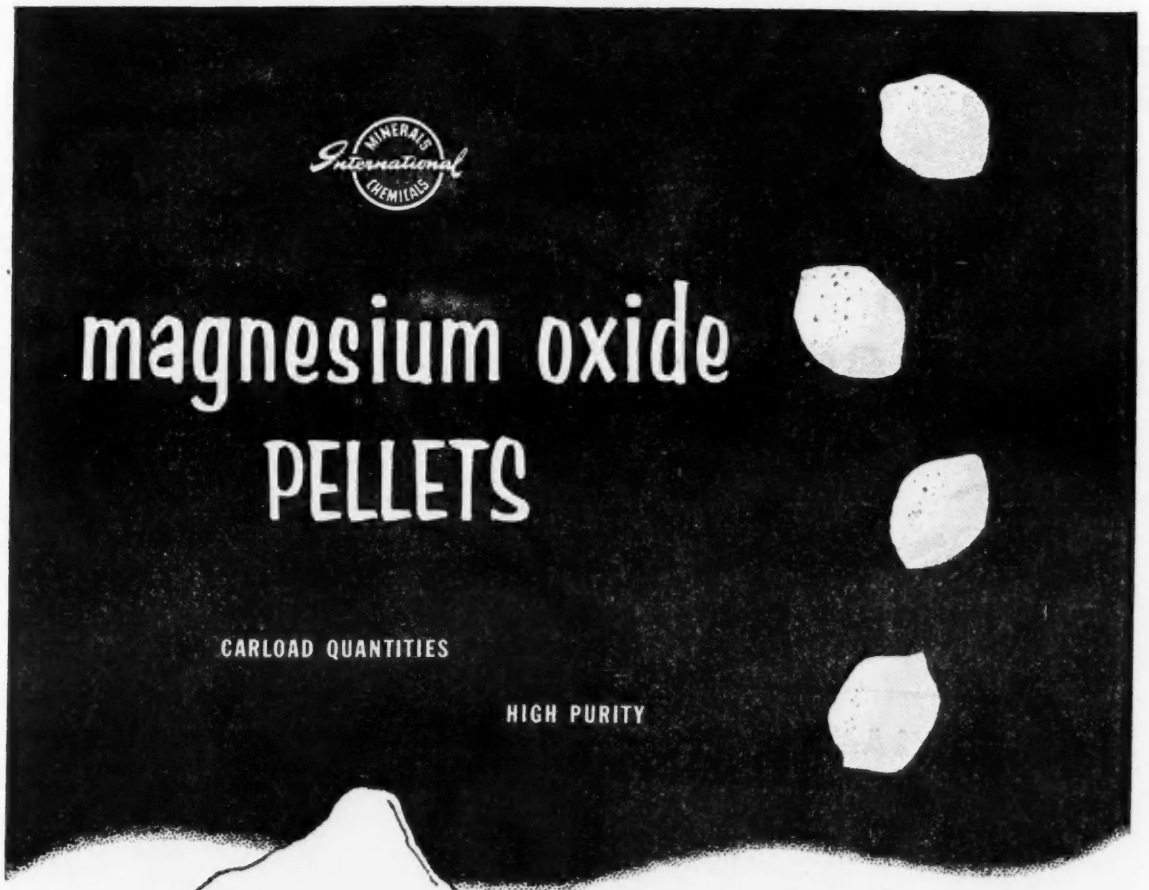
Lobelia herb, bls lb. .73 - —
Lobeline sulfate, bots., works oz. 37.50 -39.00
Logwood extract, cryst., No. 1, bbls., l.c.l. lb. .41 - —
No. 2, bbls., l.c.l. lb. .39 - —
liq., No. 1, bbls., l.c.l. lb. .20 - —
No. 2, bbls., l.c.l. lb. .19 - —
No. 3, bbls., l.c.l. lb. .18½ - —
solid, No. 1, boxes, c.l. lb. .35 - —
Lycopodium, cs lb. 2.00 - 2.25
dl-Lysine hydrochloride, bots. kilo. 140.00 -150.00

M

Mace, Siauw, siftings, bls lb. 1.43 - 1.65
West Indian, No. 1, bls. shipment lb. 1.60 - —
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼ - 26
syn. rubber grade, light, bgs., c.l., works lb. .29¼ - —
l.c.l., works lb. .30 - —
extra light, works lb. .29¼ - .30
USP, light, ctns lb. .35 - .36
heavy, bbls lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton. 38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½ - —
l.c.l., frt. equald lb. .12 - .13
truckloads, frt. equald lb. .11 - —
USP, bgs., c.l., frt. equald lb. .12½ - —
t.l., frt. equald lb. .13 - —
l.c.l. frt. equald lb. .14 - .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾ - —
l.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton. 50.00 - —
l.c.l., works ton. 55.00 -105.00
Gluconate, dms., cns lb. 1.30 - 1.37
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½ - .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works lb. .32½ - —
pigs, 10,000-lb. lots or more, works lb. .33¼ - —
sticks, cs., works, frt. alld. on carlots lb. .49 - —
Oxide (see Magnesia, calcined).
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc)
Silicofluoride, bbls., works lb. .10 - .11½
Sulfate, tech., bgs., c.l., works. 100 lbs. 2.15 - —
l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works. 100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —

Magnesium trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb. tots lb. .40 - —
100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malathion, dms., c.l., works lb. .94 - —
l.c.l., works lb. .96 - .98
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd E lb. .28 - —
tanks, dlvd E lb. .26 - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls lb. .38 - —
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½ - —
Dioxide, African 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton. 91.50 - —
paper bgs., works ton. 88.00 - —
dms., works ton. 94.00 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Gluconate, dms. lb. 1.79 - 1.93
Hydrate, bbls., dlvd lb. .36 - —
Hypophosphite, NF, dms lb. 3.52 - —
Linoleate, liq., 4.35% Mn., dms, lb. .32½ - —
solid, precip., 8.2% Mn. bbls lb. .37½ - —
Naphthenate liq., 6% Mn., dms., frt alld lb. .27 - —
Resinate, fused, 3½% Mn, dms. lb. .24 - —
precip., 6½-7% Mn, dms lb. .28 - —
Manganese sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E. ton. 80.50 - —
l.c.l., dlvd. S. E. ton. 87.50 - —
Tallate, 6% dms lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton. 71.00 - —
So. American 30% tannin, c.l., tannin, c.l., ex dock ton. 58.00 - —
Mannitol, coml., fib. dms., c.l., works lb. .60 - —
single dm., works lb. .65 - —
ton-lots, works lb. .62 - —
MBT (see 2-Mercaptobenzothiazole).
MBTS (see Mercaptobenzothiazyl disulfide).
Melamine, bgs., ton lots, works lb. .33 - —
300 to 2,000-lb. lots, works lb. .33½ - —
smaller lots, works lb. .38½ - —
Menadione, USP, bots. gram. .044 - .05
Menthol, nat., USP, Brazilian, cs lb. 9.00 - —
syn., USP, racemic, cns lb. 5.45 - —
Menthyl salicylate, tins lb. 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms. ton lots works frt. alld lb. .40 - —
less ton lots, same basis lb. .42 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .50 - —
less ton lots, same basis lb. .52 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
gran or powd., dms. 50-lb lots or more lb. 4.73 - —
Cyanide, NF VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF, fib. dms. lb. 7.72 - —
Oxide, red, NF, powd., fib. dms. lb. 5.90 - 6.01
yellow, tech. (see Yellow, mercury oxide).
USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb. per flask net-flask 278.00 -280.00
Mesityl oxide, dms., c.l., dlvd lb. .1350 - —
l.c.l., dlvd. lb. 1450 - —
tanks, dlvd. lb. 1150 - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloraniline)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .70 —
Prices on natural methanol 1¢ or less higher
syn., Zone 1, dms., c.l., dlvd., or truckload min., frt. alld. gal. .45 - —
l.c.l., same basis gal. .51 - —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan areas. gal. .33 - —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .30 - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .27½ - —

Lead Tallate—Methanol, Syn., Zone 1



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Methanol, Syn., Zone 2—α-Naphthol

Methanol, syn., Zone 2, dms., c.l., or truckload min., frt. alld. or dlvd. gal. .48 • —
l.c.l., same basis gal. .54 • —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .36 • —
tanks, 4,000 gal., min., frt. alld. or dlvd. gal. .33 • —

Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 • —
feed grade, 98½, fib. dms., same basis lb. 2.65 • —
Methoxychlor 50% wettable powder, dealers dms cs. frt. alld lb. .61 • .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½- —
l.c.l., same basis lb. .21 • —
hydrogenated, non-ret. dms., c.l., dlvd. Zone 1 lb. .21 • —
l.c.l., same basis lb. .21½- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E. gal. .57 • —
l.c.l., frt. alld. E. gal. .63 • —
tanks, frt. alld. E. gal. .45 • —

Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Acrylate, dms., c.l., t.l., dlvd. lb. .39 • —
l.t.l., dlvd. lb. .40 • —
tanks, dlvd. lb. .37 • —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E lb. .15 • —
l.c.l., dlvd. E lb. .16 • —
tanks, dlvd. E lb. .13 • —
Ketone, dms., works lb. 1.05 • —
Anthranilate, cns lb. 2.50 - 2.65
Benzoate, cns., dms lb. .53 - .65
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .78 • —
2,000-lb. lots and more, same basis lb. .65 • —
smaller lots, frt alld. on 100 lbs. lb. .89 - 1.00
standard vis., 15,400 cps.), 50-lb., bgs., c.l., frt. alld. lb. .66 • —
2,000-lb. lots and more, same basis lb. .72 • —
smaller lots, frt. alld. on 100 lbs lb. .75 - .85
Chloride, indust., cyls., frt. equald. lb. .21 • —
tanks, multi-unit, same basis lb. .15 • —
single unit, same basis lb. .11¼- —
Methyl chloroform, dms., c.l., works. lb. .13¼- —
l.c.l., works lb. .16¼- —
tanks, works lb. .12¼- —
refrigerator mfrs., cyls., dlvd. lb. .45 • —
other consumers or service men, cyls., dlvd. lb. .62 • —
Cinnamate, cns. lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works. lb. .35½- —
l.c.l., works lb. .36 • —
tanks, works lb. .34 • —
Ethyl ketone, dms., c.l., dlvd. lb. .13 • —
l.c.l., dlvd. lb. .14 • —
tanks, dlvd. lb. .11 • —
Formate, refd., dms. lb. .35 • .40
tech., non-ret. dms., any quantity, works lb. .10 • —
Heptin carbonate, bots lb. 33.00 -42.00
p-Hydroxybenzoate fib. dms. lb. 1.90 - 2.00
Ionone, standard, cns., dms. lb. 5.10 - 5.85
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 • —
l.c.l., dlvd. lb. .16 • —
tanks, dlvd. lb. .13 • —
Ketone, dms., c.l., dlvd. lb. .15 • —
l.c.l., dlvd. lb. .16 • —
tanks, dlvd. lb. .13 • —
Methacrylate, dms., c.l., t.l., frt. equald with Belle, W. Va. lb. .36½- —
smaller lots, same basis lb. .37 • —
tanks, same basis lb. .35 • —
Naphthyl ketone, cryst., cns lb. 3.60 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline, chloride, NF fib. dms., 5-lb. lots lb. 5.64 • —
Salicylate, USP, cns., 500-lb. lots lb. .56 • —
Testosterone, USP, 100-gram bots. gram. .68 • —
2-Methylbenyzlamine, dms., l.c.l., works lb. 1.25 • —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 • —
l.c.l., works lb. 1.90 • —
2-Methyl-5-ethyl pyridine dms., c.l., works lb. .47½- —
l.c.l., works lb. .48 • —
tanks, works lb. .46 • —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - 3.60
smaller lots, same basis lb. 3.40 - 3.60
Chloride, tech., dms., c.l., dlvd. E lb. .12½- —
l.c.l., same basis lb. .15 • —
tanks, same basis lb. .11¼- —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 • —
Methylparaben (see Methyl p-hydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 • .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
l.c.l., ex-whse. or frt. alld. E lb. .07 • —
paint or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
l.c.l., ex-whse. or frt. alld. E lb. .08½- —
rubber, bgs., c.l., works, frt. alld. E lb. .07½- —
l.c.l., ex-whse. or frt. alld. E lb. .08½- —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾- —
l.c.l., ex-whse. or frt. alld. E lb. .08¼- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
l.c.l., ex-wnse or frt. alld. E lb. .08½- —

Mica, wet-grd. W. of Miss R. ½c. higher. W of Rockies, 1c. higher.

Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .10¼- .11½
New York gal. .12½- —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 8.80 • —
trioxide, pure, kgs., works lb. 1.05 • —
tech., kgs., works, basis Mo. content lb. 1.25 • —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 • —
l.c.l., same basis lb. .56 • —
tanks, same basis lb. .53 • —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 • —
l.c.l., same basis lb. .11 • —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27 • —
l.c.l., same basis lb. .28 • —
tanks, same basis lb. .25 • —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine 70% contained amine, dms., c.l., dlvd. E lb. .35 • —
l.c.l., dlvd. E lb. .36 • —
tanks, dlvd. E lb. .33 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylortnotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 • —
l.c.l., same basis lb. .28 • —
tanks, same basis lb. .25 • —
Monoisopropylamine, dms., c.l., dlvd. lb. .32 • —
l.c.l., same basis lb. .33 • —
tanks, same basis lb. .30 • —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald., 100% basis, lb. .40 • —
l.c.l., frt. equald, 100% basis. lb. .40½- —
tanks, frt. equald, 100% basis. lb. .31 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .37 • —
l.c.l., frt. equald, 100% basis. lb. .37½- —
tanks, frt. equald., 100% basis. lb. .31 • —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Morphine, cns. oz. 12.40 -12.60
Acetate, anhyd., cns. oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 - 9.95
Hydrochloride, NF, cns. oz. 9.90 - 9.95
Sulfate, USP, cns. oz. 9.90 -10.05
Morpholine dms., c.l., dlvd. E lb. .54¾- —
l.c.l., dlvd. E lb. .55¾- —
tanks, dlvd. E lb. .52¾- —
Musk, syn., ambrette, 100-lb. lots, fib. dms. lb. 5.15 • —
25-lb. lots, cns lb. 5.20 • —
5-lb. lots, cns lb. 5.30 • —
ketone, 100-lb. lots, fib. dms. lb. 5.30 • —
25-lb. lots, cns lb 5.35 • —
5-lb. lots, cns lb. 5.45 • —
xylol, 100-lb. lots, fib. dms lb. 1.40 • —
25-lb. lots, cns lb. 1.45 • —
5-lb. lots, cns lb. 1.50 • —
Mustard seed, Danish, yellow, ogs lb. .11½- .12
Dutch, yellow, bgs lb. No prices
English, yellow, bgs. lb. .13 • —
Montana, oriental, bgs. lb. .08¼- —
yellow, bgs. lb. .10½- —
Myrobalans, J-1, assorted, bgs., ex dock ton. 58.00 • —
crushed, bgs., ex dock ton. 82.00 • —
Bombay, bgs., ex dock ton. 55.00 -56.00
extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 • .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 • —
imp., 78°, large lots lb. .07 Nom.
refd., dms., indust., chipped or crushed, bgs., frt. equald, lb. .12¾- —
flake, bgs., same basis lb. .14 • —
tanks, same basis lb. .11¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, basis lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs. c.l., same lb. .18½- —
fib. dms., c.l., same basis lb. .13 • —
chipped, 100-lb. paper bgs., same basis lb. .12½- —
a-Naphthol, bbls., frt. alld. lb. 1.00 • —

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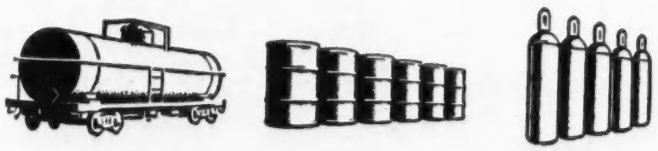
DIMETHYLAMINE

TRIMETHYLAMINE

both aqueous & anhydrous



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b-Naphthol, tech., bbls., c.l., works, lb. .34½- —
l.c.l., works lb. .36½- —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms lb 5.00 - —
Sulfate, cns lb.35.00 - —
a-Naphthylamine, bbls., frt. alld lb 50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib dms., 100-kilo lots, basis, activity gram, .60 - —
1-kilo lots, basis, activity gram. 1.20 - —
Nerolin, cns lb. 2.15 - 2.65
Niacin (see Acid, nicotinic)
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .77 - .90½
Carbonate bbls. dlvd lb. .73¾- .81¾
Chloride, bbls., dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld, lb. .68 .69
Metal, electro cathodes, cs., works, lb. .64½- —
Nitrate, bbls. works lb. .37 - .38
Oxide, black, bbls lb. .76 - —
green bbls lb. .76 - —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
l.c.l., dlvd lb. .31¼- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo.12.00 -12.30
Hydrochloride, dms. frt. adjusted, kilo.11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs lb. .11 - .11½
Nikethamide, cbys lb. 5.00 - —
m-Nitroaniline, dms., frt. alld lb. 1.05 - —
o-Nitroaniline, flaked, dms lb. .54 - .57
powd., dms lb. .60 - —
p-Nitroaniline, dms., l.c.l., frt. alld, lb. .51½- —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld lb. .13 - —
tanks, frt. alld lb. .11 - —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½- —
l.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Nitrocellulose ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15 20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
l.c.l. same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18 - —
p-Nitrochlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —

Prices West of Rockies are 1c. higher.

Nitrogen solution, 37%N, tanks, frt. equald., per ton of product basis ton.46.50 - —
40.8%N, tanks, same basis ton.51.15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.10 - 5.10
Sewage sludge, bulk, works unit-ton. 2.95 + .50
Nitromethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —

Prices West of Rockies are 1c. higher.

a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nitropropane-1, and -2, dms., c.l., dlvd. E lb. .22½- —
l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —

Prices West of Rockies are 1c. higher.

o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
l.c.l., frt. alld lb. .11 - —
tanks, frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - .36
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether, conc., bots 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., frt. alld., lb. .26 - —
l.c.l., frt. alld lb. .27 - —
tanks, frt. alld lb. .24 - —
Nutgalls, Aleppo, bgs lb. .36 - .38
Chinese, bgs lb. No prices.
Nutmeg, East Indian, bgs lb. .44 - .46
West Indian, bgs lb. .39 - .40
Nux vomica, bls lb. .10 - .12
powd., bbls., bxs lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .23¼- —
l.c.l. works lb. .23¾- —
tanks, works lb. .22½- —

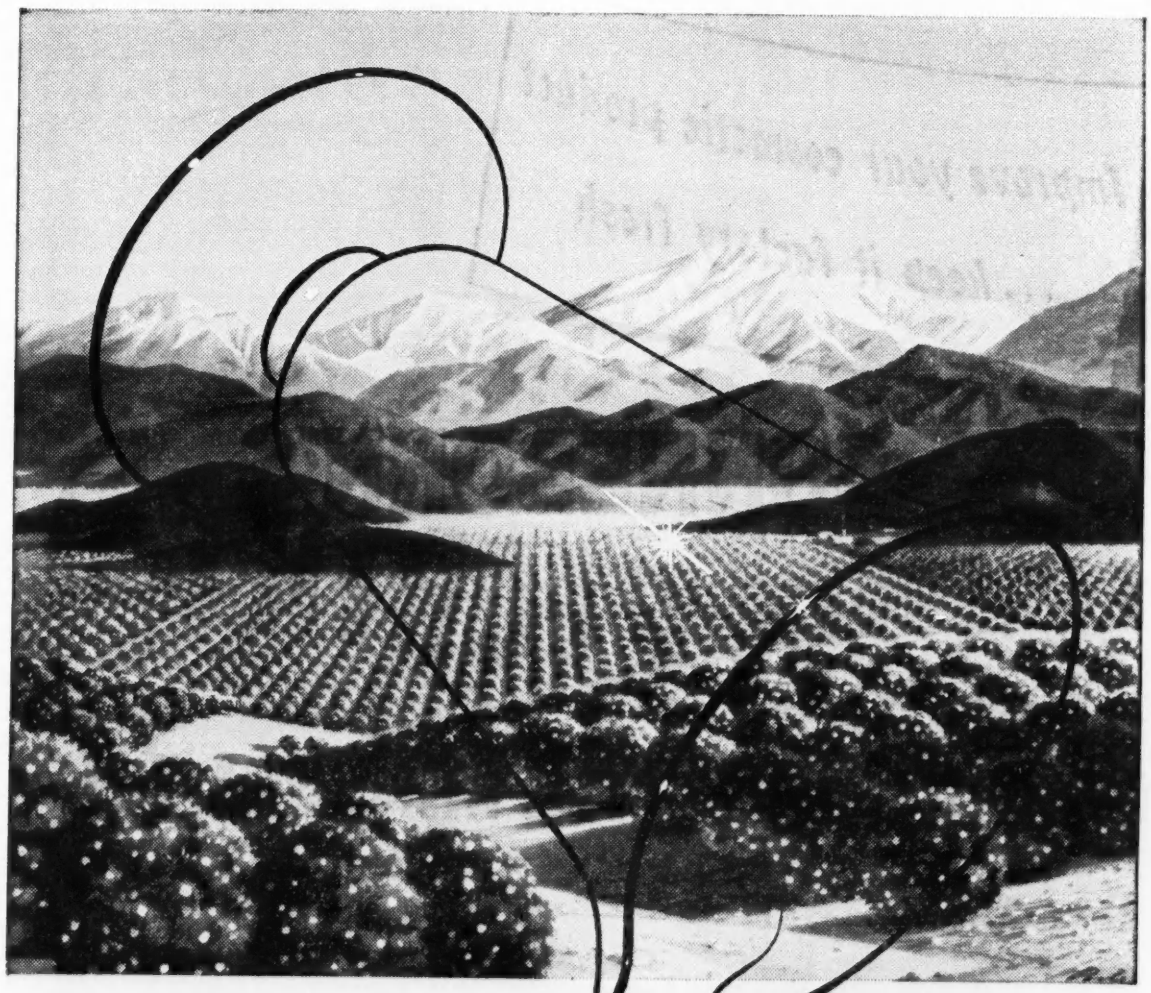
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns lb. 3.00 - 3.50
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.F.A., bots lb. 3.00 - 3.75
NF, bots lb. 3.25 - 3.75
sweet, USP, dms., cns. lb. .62 - .80
Allspice (see Oil, pimento).
Amyris, dms. lb 1.40 - 1.95
Angelica root, bots. lb.66.00 -100.00
seed, bots lb.56.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 3.25 - 4.00
Apricot, kernel, USP, dms. lb. .38 - .45
Avocado, cns lb. 3.25 - —
Bahassu, crude, tanks lb. .15¼- —
Bay, NF, Puerto Rican, 50-55%, cns lb. 1.80 - 2.75
55-60%, cns. lb. 2.10 - 2.50
West Indian, 50-55%, cns., dms. lb. 1.85 2.40
Bergamot, nat., NF, Italian, cns lb. 8.50 -11.00
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, NF, cns lb. 1.75 - —
Bois de rose, Brazil, dms lb. 4.55 - 5.60
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns lb. 1.75 - 2.10
redist., USP, cns lb. 2.25 - 3.00
Calamus, bots lb.12.00 -20.00
Camphor, sassafrassy, dms lb. .40 - .60
white, dms lb. .21 - .50
Cananga, native, cns lb. 7.85 -10.25
rectified, cns. lb.12.00 -14.75
Caraway, NF, cns lb. 3.75 - 5.00
Capsicum (see Capsicum oleoresin)
Cardamom, NF, bots lb.32.00 -40.00
Cassia, USP (see Oil, cinnamon, USP)
Castor, blown, dms., c.l. lb. .2025- —
l.c.l. lb. .2075- —
dehydrated, bodied, dms., c.l. lb. .2235- —
l.c.l. lb. .2285- —
tanks lb. .2085 Nom.
unbodied, dms., c.l. lb. .2085- —
l.c.l. lb. .2135- —
tanks lb. .1935 Nom.
hydrogenated, bgs, c.l., dlvd lb. .21 - —
l.c.l., dlvd lb. .27 - —
No. 3, tech., dms., c.l. lb. .1550- —
l.c.l. lb. .1600- —
tanks lb. .1400- —
No. 1, Brazilian, tanks lb. .14¼- —
USP, dms., c.l. lb. .1775- —
l.c.l. lb. .1825- —
tanks lb. .1625- —
refd. and deodorized, dms., c.l. lb. .1900- —
l.c.l. lb. .1975- —
tanks lb. .1750-Nom.
Cedarleaf, USP, XII, cns., dms. lb. 2.90 - 3.50
Cedarwood, cns., dms lb. 70 - 1.00
Celery seed, bots lb.12.50 -20.00
Chamomile, blue, Hungarian, bots. lb.90.00 -100.00
Oil, chenopodium, NF, cns lb. 3.75 - 5.00
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb.25.00 -65.00
leaf, crude, dms lb. 1.30 - 2.00
USP, cns., dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms lb. 1.05 - 1.70
Java, true, dms lb. 1.75 - 2.00
Java-type, cns. lb. 2.00 - 2.25
Clove, bud, USP, cns., dms. lb. 2.85 - 4.00
leaf, crude, dms lb. 1.30 - 2.00
Coconut, crude, tanks, N. Y. lb. .12½- —
Pac. Coast lb. .11⅛- —
refd., Cochin type, dms., tax incl., l.c.l lb. .19½- —
deodorized, tax incl., dms., l.c.l lb. .21½- —
Cod, Newfoundland, dms lb. .11 - —
Codliver, USP, dms gal. 1.50 - 1.80
Copaiba, cns lb. 1.80 - 2.50
Coriander, USP, bots lb.11.75 -17.00
Corn, crude, tanks, works lb. .12¼- —
foots (soapstock), acid 95%, tanks, N. Y lb. .04¾- —
refd., salad, dms. lb. .17¼- .17½
tanks lb. .15¾- —
Costus, bots lb. 8.00 - —
Cottonseed, crude, tanks, South East lb. .11¾- —
Valley lb. .11½- —
Texas lb. .11¼- .11½
foots (soapstock), acid 95%, tanks, N. Y lb. .04¾- —
raw, 50%, tanks, N. Y lb. .02 - —
refd., salad, dms lb. .15¾- .15⅞
tanks lb. .15¼- —
Creosote (see Creosote, coaltar).
Crude (see Petroleum, crude)
Cubeb, cns. lb. 4.25 - 6.25
Cumin, bots., cns lb. 4.15 5.75
Cypress, bots lb. 5.30 - —
Degras (see D).
Dilliseed, bots lb 2.80 4.25
Dillweed, dom., bots., dms lb. 3.50 - 5.00
Dip (see D)
Erigeron, cns. lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, drums lb. .70 - 1.05
80-90%, dms. lb. 85 1.25
Fennel, sweet, USP, cns. lb. 2.30 3.25
Fir, Canada, cns lb 2.35 3.00
Fish, refd., alkali, dms lb. .1330- .1380
kettle-bodied, dms lb. .1560- .1610
light-pressed, dms lb. .1180- .1230
tanks lb. .1030- —
Fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 .10
25,000 to 35,000 A units per gram dms., 1,000,000 units. .09 .10
55,000 A units per gram, dms, 1,000,000 units. .10½- .11
100,000 A units per gram., dms 1,000,000 units. .12 .14
200,000 A units per gram., dms 1,000,000 units. .12 .14
300,000 A units per gram., dms., 1,000,000 units. .12 - .14½
400,000 A units per gram, dms., 1,000,000 units. .12 .14½
500,000 A units per gram., dms 1,000,000 units. .12 14½

Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.

Fusel (see F).
Garlic, pure, bots oz. 5.75 9.50
Gaultheria (see Oil, wintergreen).



Oranges are not all alike...

There are as many different varieties of oranges as there are apples. They differ in physical appearance, juice character, peel flavor and in the many constituents which make up the component parts of the fruit. Many oranges that may be comparable in some characteristics may differ widely in others and, in some respects, one may be three or four times as potent as the other.

That is why Exchange Brand California Oil of Orange is the standard the world over for orange flavor excellence. You not only get the benefit of Exchange experience, technical skills and vast fruit resources, but Exchange Brand Oil of Orange is made only from California oranges with peel oil that is far richer in flavor strength and more intense in the aromatic constituents which are universally accepted as true orange flavor.

The cost of flavor is so small, why risk the quality of your product for penny economy? Protect its valuable reputation with the consistent quality and distinctive California feature of Exchange Brand Oil of Orange.

Exchange®
OIL OF ORANGE U.S.P.

Sunkist Growers

PRODUCTS DEPARTMENT · ONTARIO, CALIFORNIA • *Produced by* The Exchange Orange Products Co. · Ontario, California
Distributed in the U.S. exclusively by
FRITZSCHE BROTHERS, INC., 76 Ninth Ave., New York 11, N.Y. • DODGE & OLCOTT, INC., 180 Varick St., New York 14, N.Y.

Oil, Geranium—Oxyquinolin Sulfate

Oil, geranium, Algerian, cns. lb. 11.50 -14.00
Bourbon, cns. lb. 11.75 -14.50
Turkish (see Oil palmarosa)
Ginger, dist., bots. lb. 15.50 -20.00
Grapefruit, dms. lb. 2.00 - 3.25
Grease, No. 1, dms. lb. .14¾- .16½
extra, winter, strained, dms. lb. .17¼- .19
prime, burning, dms. lb. .18¾- .20¼
Guaiacwood, cns lb. 1.40 1.90
Hemlock, cns. lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots lb. 2.75 - 4.00
twice rectified, bots lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb. .38 - .55
Lard (see Oil, grease).
Laurel leaf dms. cns. lb 9.75 -12.50
Lavandin, dms., cns lb. 2.85 - 3.55
Lavendar, flower, USP, French,
30-32% ester, cns. lb. 2.85 - 4.60
38-40% ester, cns lb. 9.50 -13.20
40-42% ester, cns lb. 10.00 -16.50
spike, Spanish, cns lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms. lb. 4.50 - 5.50
Messina, cns. lb. 4.85 - 9.80
terpeneless bots lb. 32.00 -85 00
Lemongrass, cns., dms lb. 1.75 - 2.50
Lignaloe wood, Mex., cns lb. 3.70 - 4.60
Lime, dist., Mexican, cns. lb. 3.00 4.75
West Indian, cs. lb. 3.00 - 4.75
expressed, West Indian, cns lb. 7.00 - 8.00
terpeneless, bots lb. 99.50 100 00
Linseed, raw, dms., c.l., N.Y. lb. .1605- —
l.c.l. lb. .1655- .1700
tanks, f.o.b. Minneapolis lb. .1310- —
New York lb. .1435- —
tankwagon, New York lb. .1465- —
Boiled linseed oil, .006c. per lb. higher
Mace, dist., cns., dms. lb. 2.75 - 3.60
Mandarin (see Oil, tangerine).

Oil, menhaden, crude, tanks, works,
Atlantic Coast lb. .08¾ Nom.
Gulf ports, f.a.s. lb. .09½ Nom.
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .18 - —
syn., bots lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms. lb. .33 - .34
20° cold test, dms. lb. .32 - .33
30° cold test, dms. lb. .30 - .31
Neroli, NF, French, bots. lb. 85.00 -310.00
Spanish, bots. lb. 32.50 -85.00
Nutmeg, USP, dist., East Indian,
cns., dms. lb. 3.10 - 4.50
West Indian, cns., dms. lb. 3.00 - 3.60
Ocotea cymbarum, dms. lb. .87 - 1.50
Oiticica, liq., dms. lb. .15 - .15½
tanks lb. .13¾- .14
Oleo, extra, dms. lb. .15 - .15¼
Olibanum, bots. lb. 5.50 - 7.65
extra fine, bots lb. 8.00 - 9.00
Olive, edible, Spanish, dms., duty paid gal. 2.40 - 2.45
Tunisian, same basis gal. 2.30 - 2.35
Orange, sweet, dist., cns lb. .50 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms. lb. .55 - 1.25
Florida, cns., dms. lb. .50 - 1.25
Messina, cns. lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
sesquiterpeneless, bots lb. 65.00 -120.00
Origanum, Spanish, cns lb. 1.75 - 2.85
Palm, clarif., dms lb. .13 - .13½
kernel, denat., tanks lb. .12¼ Nom.
Palmarosa, cns lb. 8.00 -10.00

Oil, paraffin, pale, 100-110 vis., at 100°F, tanks, East Coast refy. gal. .14 - —
Patchouli, dms. lb. 8.00 - 9.50
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .17¼ Nom.
refd., dms. lb. .21¾- .22¼
tanks lb. .20¼- —
Pennyroyal, USP imported, cns lb 2.50 - 3.50
Peppermint, nat., dms. lb. 6.25 - 8.00
redist., USP, dms. lb. 6.55 - 9.00
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms. lb. 3.50 - 4.80
Pimento, berry, NF, dms. lb. 4.20 - 6.00
leaf, cns. lb. 2.60 - 3.10
Pine, dest.-dist., dms., l.c.l., works, lb. .11¼- —
ex-whse. lb. .1325- —
steam dist. dms., ex whse., N.Y.C. lb. .163 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .15¾- —
Red (see Acid, oleic).
Rice, bran, clarif., dms., l.c.l. lb. .18 - —
tanks, dlvd. E. lb. .14 - —
Rose, nat., Bulgarian, bots. oz. 43.50 -62.25
Rosemary, Spanish, USP, cns., dms. lb. .60 - 1.00
tech., cns., dms. lb. .50 - .70
Rue, bots. lb. 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1600- —
tanks, same basis lb. .1450- —
Sage, clary, bots. lb. 18.50 -25.00
Dalmatian, cns. lb. 4.60 6.00
Spanish, cns. lb. 1.15 - 1.40
Sandalwood, NF, cns. lb. 19.00 -20.00
Sardine, crude, tanks, Pac. coast. lb. .09 Nom.

Oil, sassafras, artif., dms. lb. .85 - 1.25
nat., dom., USP, dms. lb. 1.75 - 2.10
imp., Brazilian (see Oil ocotea cymbarum).
Savin, cns. lb. 2.75 - —
Savory, cns. lb. 4.25 - —
Sesame, refd., dms lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works gal. .44 - —
tanks, works gal. 23 - —
Snakeroot, Canada, cns. lb. 27.50 -31.00
Soybean, crude, tanks, Decatur lb. .10⅞- .11
foots (soapstocks), acid, 95%, tanks, N. Y. lb. .06 Nom.
raw, 50%, tanks, N. Y. lb. .02⅝- —
refd., alkali, dms. lb. .14⅝- .14⅞
tanks lb. .13¼- —
clarified, dms. lb. .14½- .14½
tanks lb. .12⅝- —
salad, dms. lb. .15½- .15½
tanks lb. .13⅝- —
Spearmint, USP, dms. lb. 4.75 - 5.60
Sperm, bleached winter, 45° dms. lb. .1725- .1750
tankcars lb. .1550- —
nat., winter, 45°, dms. lb. .1625- .1650
tankcars lb. .1450- —
Spruce, cns., dms lb. 2.10 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 9.50
Southern, cns lb. 2.50 3.00
Tall, crude, dms., c.l., works lb. .03¼- —
tanks, works lb. .02½- —
dist., dms., c.l., works lb. .07½- —
l.c.l., works lb. .07¾- —
tanks, works lb. .06¼- —
refd., dms., c.l., works lb. .06½- .06¾
l.c.l., works lb. .06¾- .07¼
tanks, works lb. .05¼- .05¾
Tallow, acidless, dms lb. .13 - .14¼
Tangerine, Floridian, dms lb. 2.00 - 2.80
Tansy, dms. lb. 7.50 - 8.40
Tar acid (See T's).
Pine, comil., dms., c.l., works lb. .528 - .538
l.c.l., works lb. .601 - —
whse. lb. .712 - —
tanks, works lb. .427 - .438
rectified, NF, drs., incl., l.c.l., works, South gal. 1.07 - —
ex whse., N. Y. C. gal. 1.15 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms. lb. 1.70 - 3.75
white, cns lb. 1.95 - 4.00
tech., white, cns lb. .40 - 1.85
Tung, dms., c.l., N. Y. lb. .26¾- .26⅞
l.c.l., same basis lb. .27 - .27½
tanks, N. Y. lb. .25¼- .25⅜
domestic mills lb. .24¼- .24⅜
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms. lb. .28 - .45
Vetiver, Bourbon, cns. lb. 13.00 -17.00
Haitian, cns. lb. 10.50 -17.50
Java, cns. lb. 22.50 -40.00
Wheat, germ, 5-gal. dms. gal. 10.00 -13.00
White mineral, tech., 50-65 vis., non-ret. dms. c.l., t.o.b. N. Y. gal. .51½- .54¼
65-75 vis., non-ret., dms., c.l., same basis gal. .52½- .55
l.c.l., same basis gal. .57½- .58¼
80-90 vis., non-ret., dms., c.l., same basis gal. .53½- .56¼
l.c.l., same basis gal. .58½- .59¼
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62¼
l.c.l., same basis gal. .64½- .65¼
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - 68¼
l.c.l., same basis gal. .71 - .71¼
175-185 vis., non-ret. dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
l.c.l., same basis gal. .77½- .78
345-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Chenopodium, NF).
Wormwood, cns. lb. 5.00 - 6.85
Ylang-ylang, Bourbon, bots. lb. 17.00 -30.00
extra, bots lb. 28.00 -40.00
Madagascar, bots. lb. No stocks
Oleostearine, bbls. lb. .11¼- .11⅛
Opium, USP, cns lb. 19.20 -19.45
gran., USP, cns. lb. 21.65 -21.90
powd., USP, cns lb. 21.65 -21.90
Orange cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner lb. 1.30 - —
vis., non-ret., dms., c.l., same basis gal. .69½- .73
Mineral, American, bbls., l.c.l., works lb. .2085- .2110
Molybdated, bbls. lb. .45 - —
o-Nitroaniline toner, kgs lb. 1.15 - —
Orange peel, bitter, Haitian, bls. lb. .14 - .16
sweet, bls lb. .16 - .18
Orris root, Florentine, bls. lb. .45 - .50
powd., bbls., bxs lb. .50 - .53
Verona, bls lb. .35 - .40
powd., bbls., bxs lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthopehenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage, orange, cryst., No. 1, bbls. l.c.l. lb. .40 - —
extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots. gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
smaller lots, works lb. 4.92 - 5.17

Improve your cosmetic product ...keep it factory fresh

...WITH SONNEBORN'S VITAMIN E FORTIFIED CARNATION WHITE MINERAL OIL

Creams, hair oils, hair dressings, suntan oils . . . whatever your cosmetic product . . . the White Oil you use should be fortified with Vitamin E to assure greatest stability against odor and color development. Now Sonneborn Research Laboratories have developed and patented a Vitamin E-fortified white oil—CARNATION White Mineral Oil—to help make your finished product better . . . keep it factory fresh.

√ exceptional purity!
√ excellent stability!
√ outstanding odor and color resistance!
√ longer shelf life!

Give your cosmetic product the stability, the superior shelf life, the greater customer satisfaction—which CARNATION White Oil can help assure.

Why take chances when protection costs no more! Insist on Sonneborn CARNATION White Oil fortified with Vitamin E!

Achieved by Sonneborn RESEARCH

L. SONNEBORN SONS, INC.
New York 10, N.Y.

P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb. 4.00 - —
Pancreatin USP bots lb. 1.90 - 2.10
Papain, USP, African, bots lb. 3.50 - 4.00
Ceylon lb. 3.00 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate, cns oz. 7.10 - 7.35
Paprika, Roumanian, bgs lb. .27 - —
Spanish, bgs. lb. .33 - .40
Yugoslavian, bgs lb. .36 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloroaniline).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale white 127°
123°F ASTM, solid, c.l., refy lb. .0710- —
fully refd., 122°-124°F, ATSM, slabs loose, c.l., refy lb. .0845- —
125°-127°F. ASTM, slabs loose, c.l., refy lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., refy lb. .0855- —
132°-134° ASTM slabs, loose, c.l., refy lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., refy lb. .0855- —

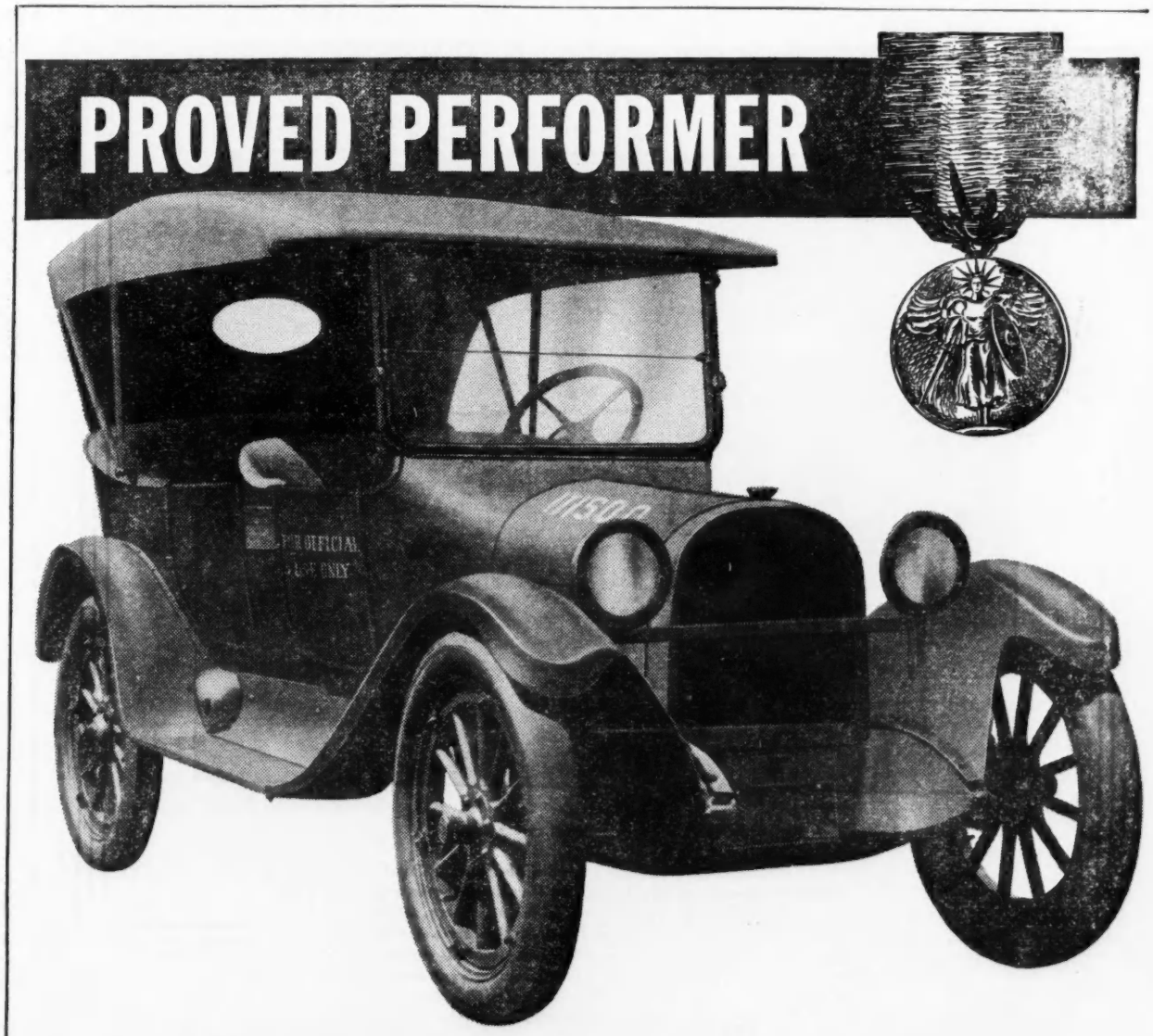
Prices for paraffin in bags and ctns., c.l. 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb. higher

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .1075- —
l.c.l., frt. alld lb. .1275- .1375
powd., bgs., c.l., frt. alld lb. .15½- —
l.c.l., frt. alld lb. .17 - —
USP X, fib. dms., c.l lb. .183 - —
1,000-lb. lots lb. .193 - —
smaller lots lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works lb. .14½- —
tanks, works lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% dealers, dms., works lb. .50 - .53
tech., dms., c.l., t.l., works lb. 1.3395- —
l.c.l., works lb. 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide)
Paratoluidine (see p-Toluidine).
Paris green, dealer, distributor, dms. c.l., works, frt alld. on 96 lbs or over lb. .36 - .40
l.c.l. same basis lb. .37 - .53
Passion flower herb bls lb .20 - .21
Peanut meal, 45%, old process, bgs., mills ton. 78.00 Nom.
Pectin, citrus, NF, powd., bbls lb. 2.05 - 2.06
tech., powd., bbls lb. 1.50 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .03½- .04
Procaine bulk 1,000,000 units. .03½- .04
Sodium, sterile, bulk, 1,000,000 units. .03½- .04
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22½- .29
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14½- —
Pepper, black, Malabar, spot, bgs. lb. .42 - —
red, Gondar, spot, bgs lb. .28 - .30
Japanese, hontaka, bgs lb. .33 - .34
birdseyes, bgs., new crop lb. .50 - —
Mombasa, bgs., shipt. lb. .72 - —
Nigerian, bgs lb. .30 - —
Turkish, bgs lb. .24 - .25
white, bgs. lb. .50 - —
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls. lb. 1.10 - —
Pepsin NF, 1:3,000 bulk lb. 3.45 - 3.50
Perchloroethylene, dms., c.l., or truckloads, dlvd. E lb. .12½- —
l.c.l., dlvd. E lb. .14 - —
tank trucks, 1,000 gal. min., dlvd. E lb. .11½- —
tanks, dlvd E lb. .11 - —
dlvd. W lb. .11½- —
Peru balsam, dms lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy lb. .05¼- .05⅜
l.c.l., dlvd. lb. .07 - .07¼
tanks, refy lb. .03½- .04⅜
cream, dms., c.l., refy lb. .05⅜- .07⅜
l.c.l., dlvd lb. .08¾- .09
tanks, refy lb. .04⅜- .05⅞
extra amber, dms., c.l., refy lb. .05½- .06⅛
l.c.l., dlvd lb. .07¼- .07½
tanks, refy lb. .03¾- .04⅜
USP, white, lily, dms., c.l., refy. lb. .06⅞- .07½
l.c.l., dlvd lb. .09⅛- .09⅜
tanks, refy lb. .05⅛- .06¼
snow, dms., c.l., refy lb. .07¾- .08
l.c.l., dlvd lb. .09⅜- .09⅝
tanks, refy lb. .05⅜- .06⅛
soft, dms., c.l., refy lb. .07 - .08
l.c.l., dlvd. lb. .08¾- .09
tanks, refy lb. .05¼- .06⅛
yellow, soft, dms., c.l., refy lb. .05½- .06
l.c.l., dlvd lb. .07⅛- .07⅝
tanks, refy lb. .03¾- .06⅛
Petroleum, lacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles. gal. .169 - .204
East coast, N. J., N. Y. gal. .19 - —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco gal. .164 - —
East coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —
odorless, tanks, refy., Watson, Cal gal. .245 - —
Borger, Tex gal. .24 - —
Houston, Tex gal. .24 - —
Wood River, Ill. gal. .2625- —
dlvd. N. J gal. .32 - —
dlvd. N. Y gal. .33½- —
tankwagon, N. J., dlvd gal. .35 - —
N. Y., dlvd gal. .37 - —
Petroleum, naphtha, cleaners, tanks, East Coast, N. J. and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic)
VM&P, 225°-300°F, b.r., tanks, West Coast, Los Angeles, gal. .169 - —
Portland, Ore gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —
East Coast, N. J., N. Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .205 - —
Chicago gal. .289 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282°F, b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r., 43°C. m.a.p., N. J gal. .26 - —
212°-284°F b.r., 19°C. m.a.p., N. J gal. .29 - —
224°-280°F. b.r., 48°C. m.a.p., Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., N. J gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°-386°F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-344°F., b.r., 13.5°C. m.a.p., Texas City gal. .33 - —
Petroleum, solvent, part, aromatic, tanks, 310°-348°F, b.r., 17°C., m.a.p., N. Y., N. J. gal. .35 - —
320°-360°F. b.r., 16°C. m.a.p., N. Y., N. J. gal. .33 - —
324°-349°F., 37°C. m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F. b.r., 30°C. m.a.p., Houston gal. .33 - —
352°-410°F b.r., 16.5°C. m.a.p., Texas City gal. .33 - —
358°-401°F., b.r., 25°C. m.a.p., N. Y., N. J gal. .39 - —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y gal. .17 - —
Group 3 gal. .12375- —
Pennsylvania, western gal. .15 - —
Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret., dms., c.l., works lb. .16 - .18¼
l.c.l. works lb. .17 - .18½
tanks, works lb. .14 - .16¼

Pancreas Substance—Phenothiazine

Petroleum sulfonate, oil soluble, 50-55% sulfonic content, non-ret dms., c.l., works lb. .15½ —
l.c.l., works lb. .16½- —
tanks, works lb 12½- —
o-Phenetidine, dms. works lb 1.00 —
p-Phenetidine, dms. works lb 1.00 —
Phenobarbital, USP, dms. 100-lb lots lb. 3.50 - —
Phenobarbital-sodium USP dms. 100-lb. lots lb. 3.50 - —
Phenol, 90-92% (cresol 8-10%), non-ret dms c.l. frt alld E. of Rockies lb. .16¾- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .15 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .16¼- —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14½- —
39° or above, tar distilled, non-ret. dms., c.l., same basis. lb. .17¾- —
l.c.l., same basis lb. .18½- —
tanks, same basis lb. 15½ —
USP, syn., dms., c.l., frt. alld. lb. .18¾- —
1,000-lb lots or more, same basis lb. .19½- —
less than 1,000-lb lots, same basis lb. .20½- —
tanks, same basis lb. .17 - —
Phenolphthalein USP or yellow bbls. dms. 2,000-lb lots lb 1 10 —
smaller lots lb 1 12 1.17
Phenothiazine NF fib dms. c.l. frt adjusted lb .39 —
over 2,100 lbs., same basis lb. 41 —
less than 2,100 lbs. same basis lb 43 —



This Dodge is the first passenger car used by the U. S. Army as a combat vehicle. It accompanied General John J. Pershing on the 1916 Mexican Expedition, and at one time was driven by a young lieutenant named George S. Patton! The old car still runs beautifully, 40 years since it saw the smoke of battle.

Outstanding service and time-tested dependability are points of pride with Esso Petroleum Solvents, too. These fine products have proved their worth over many years of use by customers who expect . . . and get . . . the highest quality for their money. Why not see for yourself? Specify Esso Petroleum Solvents next time you order.

You can depend on Esso Solvents for

MULTI-STORAGE AVAILABILITY—water terminals in industrial centers.

MODERN HANDLING METHODS — separate tank storage, pumping lines, tank cars and trucks are used in all handling operations. Prompt delivery to your door is assured.

SOLVENCY — Esso aliphatics and Solvesso aromatics cover both high and low solvency ranges.

CONTROLLED EVAPORATION—available in a wide range of evaporation rates with precise characteristics to meet your most exacting requirements.

FOR TECHNICAL ASSISTANCE — If you have a solvents problem or want further information on the specifications and characteristics of Esso Solvents—write or call our office nearest you. Our technicians will be glad to assist you.

ESSO

PETROLEUM SOLVENTS

SOLD IN: Me., N. H., Vt., Mass., R. I., Conn., N. Y., N. J., Pa., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY

Boston, Mass. — Pelham, N. Y. — Elizabeth, N. J. — Bala-Cynwyd, Pa. — Baltimore, Md. — Richmond, Va. — Charlotte, N. C. — Columbia, S. C. — Memphis, Tenn. — New Orleans, La.

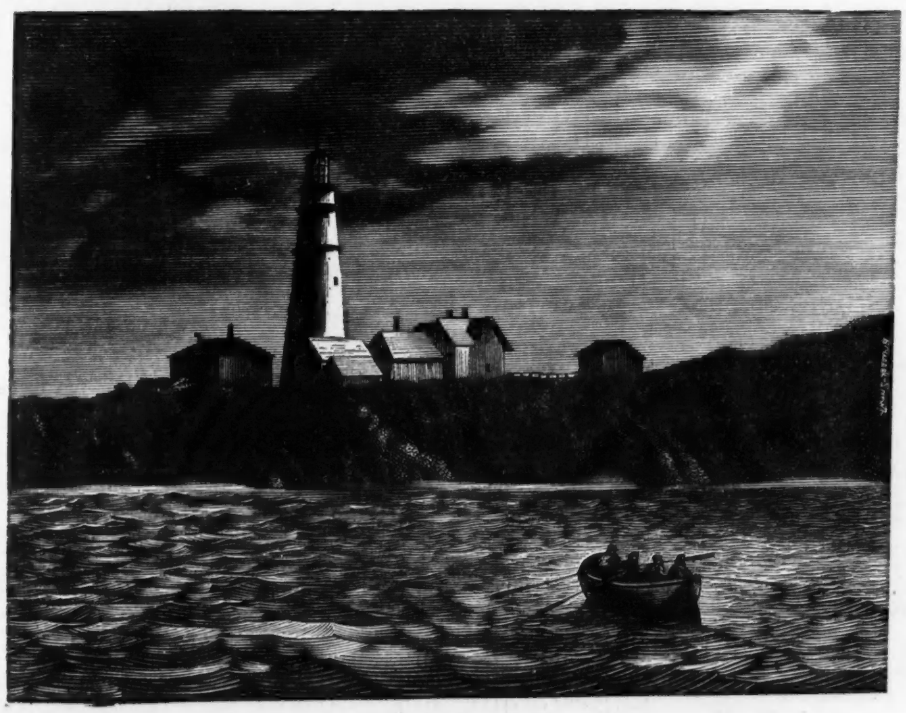
Phenyl Acetate—Potassium Sulfate

Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 - 4.65
Phenylacetamide, 125-lb. dms., works lb. 1.10 - —
smaller dms., works lb. 1.15 - 1.10
dl-Phenylalanine, dms. works lb. 27.00 - 37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. drms., dlvd. E lb. 3.60 - —
smaller dms., dlvd. E lb. 4.00 - —
Phenyldiethanolamine dms., c.l., dlvd. E lb. .40½- —
l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine dms., frt. alld. lb. .90 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine redist., dms., works lb. 2.00 - —
tech., refd., dms., same basis lb. 1.10 - 1.35
Phenylethanolamine, dms., c.l., works lb. .75½- —
l.c.l., same basis lb. .76 - —
Phenylethyl acetate, bots lb. 1.30 - —
b-Phenylethylamine, dms., 1,000-lb. lots, works lb. 1.10 - —
smaller lots, works lb. 1.15 - 1.40
Phenylhydrazine base, CP, bots lb. 3.00 - 3.07
Hydrochloride, coml., kgs., works lb. 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, dlvd. E lb. 1.80 - —
smaller lots, dlvd lb. 2.10 - —

Phenylethylphenyl acetate, bots lb. 3.95 - 4.40
o-Phenylphenol, dms., l.c.l., works lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .35 - —
l.c.l., works lb. .39½- —
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
C.P., bots., works lb. 17.75 - —
tech., fib. dms., works lb. 10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 43.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.82 - 5.06
70-68%, b.p.l., c.l., same basis long-ton. 5.22 5.46
72-70% b.p.l., c.l., same basis long-ton. 5.87 - 6.11
75-74% b.p.l., c.l., same basis long-ton. 6.87 - 7.11
78-76%, b.p.l., c.l., same basis long-ton. 7.87 - 8.11
The above prices are based on fuel oil at $2.35 per bbl. and labor at $1.31.
Phosphorus, amorph., red, dms., t.l., works lb. .43 - —
smaller lots, works lb. .44 - .45
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt. equald. lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .12½- —

Phosphorus pentasulfide, solid, dms., c.l., works lb. .11½- —
l.c.l., works lb. .12½- —
Pentoxide, dms., c.l., works lb. .13½- —
t.c.l., works lb. .16½- —
Sesquisulfide, tins, cs., works lb. .29 - —
export, dms. lb. .31 - .36
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½- —
Phthalic anhydride, bgs, c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19¼- —
Phthalimide, 97%-98%, dms., works, frt. alld lb. .65 - .70
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
2-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 5% dms., c.l., works, lb. .32½- —
l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., c.l., works, lb. 2.65 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Nitrate, USP, bots., vials oz. 4.80 - 4.90
Pimento, Jamaican, bgs lb. .85½- —
Mexican, bgs. lb. .68 - —
Pink root, bls. lb. 2.00 - 3.25
d-Piperazine hexahydrate, French Codex, bots kilo. 8.00 - 8.50
Piperidine, dist., dms., frt. equald. lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E lb. 4.50 - 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25

Pitch, coaltar, 150°-170°F. m.p., tanks, works ton. 37.00 - —
Cottonseed, raw, dms., works lb. .02¼- .03
Linseed, dms lb. .06 Nom.
Marine, dms. lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 Nom.
Tall, dms., works lb. .03¾- .04½
Plaster of Paris (see Gypsum).
Platinum metal, works oz. 90.00 -94.00
Pleurisy root, bls m. 45 - .50
Podophyllum resin, NF, dms lb. 14.25 - —
Poke root, bls lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .19 - —
Dutch, bgs. lb. .22 - .23
Iranian, bgs. lb. .15 - —
Polish, bgs. lb. .19½- .21½
Turkish, bgs. lb. .20½- .21
Potash, caustic reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs. 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP, gran., dms. lb. .22 - —
powd. dms lb. .24 - —
Bichromate, bgs., c.l., works. lb. .16½- —
l.c.l., works lb. .17 - —
Potassium bichromate in dms ¾c. higher.
Bitartrate, NF, dom., gran., or powd., bbls., 5,000 lbs., 1 shipt lb. .36½- —
dms., c.l. lb. .36 - —
smaller lots lb. .37 - .40
imp., kgs lb. .27¾- .28
Bromate, dms., 1,000 lbs. or more, lb. .47 - —
25-200-lb. lots lb. .57 - .62
Bromide, USP, gran., bbls., kgs. lb. .36 - —
Carbonate, N.F., gram., bbls., dms lb. .20 - —
powd., bbls., dms lb. .21 - .22
tech., calcined, bbls., c.l., works. 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate, cryst., dms., c.l., works lb. .10¼- —
l.c.l., works lb. .10½- .11½
powd., dms., c.l., works lb. .10¾- —
l.c.l., works lb. .11 - .12
export, dms., New York lb. .12¾- .13½
NF, gran., 25-lb. metal dms lb. .35 - —
Chloride, USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd. dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP gran., dms lb. .41 - —
powd., dms lb. .40½- .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb. lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, drums, ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots lb. .22½- —
smaller lots lb. .23 - —
Fluoborate, fib. dms., c.l., works lb. .30 - —
l.c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate dms lb. .75 - .79
Guaiacolsulfonate, NF dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .28½- .30
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms. lb. 1.90 - 1.95
Manure salt, 22% K_2O, base price, unit-ton. .17 - .1765
July forward unit-ton. .38 - —
Metabisulfite, gran., dms lb. .20 - .21
powd., dms lb. .25 - —
Muriate, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-on. .38 - —
bgs., c.l., works, base price. ton. 26.00 - —
July forward ton. 27.20 - —
Nitrate, cryst., bbls., 20-ton lots. 100 lbs. 14.40 - —
smaller lots 100 lbs. 14.65 - 14.90
gran., bbls., 20-ton lots. 100 lbs. 9.75 - —
smaller lots 100 lbs. 11.10 - 11.50
powd., bbls., 20-ton lots. 100 lbs. 10.75 - —
smaller lots 100 lbs. 12.00 - 12.50
USP, gran., dms. lb. .18 - —
Potassium nitrate in bags, 50c. per 100 lbs. less in kegs, $1 more.
Oxalate, neutral, tech., fine gran., bbls., dms. lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton. 191.50 - —
dms., ton lots, ex whs ton. 198.00 - —
smaller lots, ex whse ton. 302.50 - —
Powdered Potassium pentaborate, $10.25 per ton higher.
Perchlorate, dms., c.l., works lb. .17½- —
l.c.l., works lb. .18 - .19
Permanganate, cm'l., dms., works lb. .23½- .26½
USP, dms., works lb. .26½- .28
Persulfate, dms., 5-ton lots, works. lb. .18 - —
1-ton lots, works lb. .20 - —
Phosphate, tetrabasic, bbls., works. lb. .16½- .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass, bgs., c.l., works 100 lbs. 17.00 - 17.30
l.c.l. 100 lbs. 17.80 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms., or more, works 100 lbs. 6.55 - 6.95
tanks, works 100 lbs. 5.45 - —
electrical grade, 29° Be, 1:2.0 dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.20 - 7.60
Silicofluoride, bbls., works lb. .099 - .1040
Stannate, dms., frt. alld. E lb. .689 - .755
Sulfate, agricultural, 50% K_2O, bulk, works, base price. unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII cryst., dms lb. .31 - .33
gran., dms. lb. .18½- —
powder, dms. lb. .36½- .17



FAMOUS LIGHTHOUSES OF AMERICA

PORTLAND HEAD LIGHTHOUSE, Maine, was built between 1787 and 1790 by two Portland masons engaged by George Washington, who instructed them to use rubble stone taken from fields and shores. During the Civil War, when raids on shipping required sighting the light from greater distances, the tower was raised 8 feet. Today it stands 80 feet above land and 101 feet above water at the southern entrance to Portland Harbor. It is one of the four Colonial lighthouses that have never been rebuilt.

A Landmark of Quality in the field of electrochemicals is the name Niagara Alkali Company. First to produce several of these important chemicals in America, Niagara is a pioneer in their development and application. You can rely on Nialk® Liquid Chlorine, Nialk Caustic Potash, Nialk Carbonate of Potash, Nialk Paradichlorobenzene, Nialk Caustic Soda, Nialk TRICHLORethylene, Niagathal® (Tetrachloro Phthalic Anhydride).

NIAGARA ALKALI COMPANY

60 East 42nd Street

New York 17, N.Y.

Potassium sulfocyanide, NF, cryst. (see Potassium thiocyanide).
Thiocyanate, NF, cryst., dms. lb. .84 - .94
tech., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .14 - —
5-ton lots, works lb. .14¼ - —
1-ton lot or less, works lb. .14¾ - —
Toluene sulfonate, dms., c.l. or tl. works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works basis 40% K_2SO_4, 18% MgO, base price ton 13.45 - —
July forward ton 14.00 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l. lb. .36½ - —
5,000-lb. lots lb. .37 - —
smaller lots lb. .37½ - .42½
Potassium-titanium fluoride, fib, dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb. .50 - —
l.c.l., works lb. .52½ - .53
Pregnenolone, bots gram. .45 - —
Acetate, bots gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld. lb. 2.90 - —
100-lb. lots lb. 3.00 - 3.60
Progesterone, USP, bots., 100 gram lots gram. .50 - —
Acetate, bots gram. .70 - —
Propane, indust., tanks, group 3. gal. .03½ - —
N. Y. Harbor gal. .08 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .12¾ - —
l.c.l., dlvd lb. .13¾ - —
tanks, dlvd lb. .1075 - —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 - 4.40
p-Hydroxybenzoate, USP, dms. lb. 2.30 - 2.40
Thiouracil bots., 50-kilo lots or more kilo. 53.00 - —
smaller lots kilo. 53.10 - 55.30
Propylene dichloride, dms., c.l., dlvd. E. lb. .0825 - —
l.c.l., same basis lb. .095 - —
tanks, same basis lb. .07 - —
Prices in West 1c. higher dlvd., on same basis.
Glycol, indust., dms., c.l., dlvd. E. lb. .15½ - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .13½ - —
Propylene glycol, USP, dms., c.l., dlvd. E. lb. .17½ - —
l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .15½ - —
Methyl ether, dms., c.l., dlvd. lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —
Oxide, dms., c.l., dlvd. E. lb. .17½ - —
l.c.l., dlvd. E. lb. .18½ - —
tanks, dlvd. E. lb. .15½ - —
Psyllium seed, black, bgs. lb. .55 - —
blonde, bgs. lb. .18 - —
husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾ - .04¼
smaller lots lb. .03⅞ - .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ - —
fine, bgs. ton lots lb. .04 - —
sun dried, coarse, bgs. ton lots lb. .02½ - .04
fine, bgs., ton lots lb. .02½ - .04
Pumpkin seed, bgs lb. .25 - .26
Pyrethrin, syn., (see Ailethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
powd., 1.3% pyrethrins, bbls., works lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.35 - 8.55
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal. 41.75 - 42.75
oleoresin, dewaxed, 20%, dms., works lb. 9.80 - 9.90
purif., 20% dms., works lb. 10.00 - 10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 - —
l.c.l., same basis gal. 2.80 - —
refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .46 - —
Pyrites, Canadian, works long-ton 3.00 - 8.00
Pyrocatechol (see Catechol).
Pyrogallol, NF, dms. lb. 3.27 - 3.30
Pyroxylin, scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms., works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 - —
white, china, ivory, dms., works lb. .16 - —
dense, opaque, dms., works, lb. .12 - .15
translucent pastels, cs., works, lb. .14 - —
transparent colorless, dms., works lb. .25 - —
colors, dms., works lb. .15 - —
USP, bots lb. 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs. c.l., lb. .16¼ - .16¾
liq., 35% tannin, bbls., works, lb. .08¼ - —
Quebracho extract, solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64 - —
ord. 63% tannin, bgs., c.l., same basis lb. .11 21/32 - —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq., No. 1, bbls. l.c.l lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots, oz. .37½ - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½ - —
Hydrobromide, NF, cns., 50-oz. cns. oz. .47½ - —
Sulfate, USP, cns., 100-oz. lots oz. .42 - —
Quinine and Urea hydrochloride, NF, cns oz. .56 - —
Quinoline, dms., c.l., frt. equald lb. .50¾ - —
l.c.l., same basis lb. .51¼ - —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
powd., frt. alld. 100% basis lb. .98 - —
Rauwolfiia serpentina, root, powd., bbls, dms lb 2.00 - 3.00
Red, BON acid maroons, pure, bbls., lb 1.75 - —
resinated, bbls lb 1.50 - —
Red, BON acid arylid, deep shades, bbls. lb. 3.60 - —
light shades, bbls lb. 2.75 - —
maroon, bbls lb. 3.60 - 3.90
Cadmium, CP, dark shade, bbls., frt, alld, E. of Rockies lb. 4.30 - —
light shade, bbls., same basis, lb. 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls, same basis lb. 3.95 - —
orange red, bbls., same basis, lb. 1.81 - —
Lithopone light red shades, bbls., same basis lb. 2.01 - 2.16
medium light red shades, bbls., same basis lb. 2.19 - —
medium red shade, bbls., same basis lb. 2.37 - 2.52
dark red shade, bbls., same basis lb. 2.57 - 2.82
maroon shade, bbls., same basis lb. 2.82 - 3.05
dark maroon shade, bbls., same basis lb. 3.02 - —
Red cadmium lithopone all shades, in smaller pkgs., 5c. per lb. higher; all prices are 1c per lb higher ex whse. Los Angeles and San Francisco.
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin toner, bbls, works lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .12¾ - —
Iron oxide, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., lb. .04 - .07½
syn. 98% ferric oxide, bgs., c.l., works lb. .12¾ - —
l.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb. 1.10 - 1.20
Lithol toner, bbls., works lb. .85 - —
rubine toner, pure, bbls., works, lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., c.l., works lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. .02½ - —
l.c.l., works lb. .02¾ - —
Naphthol ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works lb. .06¾ - —
l.c.l., works lb. .07 - —
Para, toner, bbls. lb. 1.05 - —
chlorinated, kgs lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works, kegs. lb. 6.15 - —
Spanish oxide, bbls., c.l., ex dock, lb. .05¾ - —
l.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½ - —
Toluidine toner, deep shades, kgs., works lb. 1.60 - —
light shades, kgs., works lb. 1.60 - —
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald lb. .24½ - .25

Potassium Sulfocyanide—Rottenstone

Red, venetian, 15%, bgs., works lb. .0350 - .037
20%, bgs., works lb. .0475 - —
25%, bgs., works lb. .0523 - —
30%, bgs., works lb. .0550 - —
35%, bgs., works lb. .0575 - —
40%, bgs. works lb. .0625 - —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-o-aminotoluene).
Red, precipitate (see Mercuric oxide, red).
Red saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots gram. 10.00 - —
Resorcinol, tech. grade, dms., c.l., works lb. .77½ - —
l.c.l., works lb. .78½ - —
USP, cryst., dms., works lb. 2.75 - —
powd., dms., works lb 2.95 - —
Monoacetate, NF, dms lb 3.00 - 3.25
Rhatany root, bgs lb .15 - .16
Rhodinol 5-lb. cans lb 25.50 - 34.00
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls lb. 2.50 Nom.
Riboflavin, USP, bots., dlvd. kilo. 80.00 - —
readily soluble, bots., dlvd kilo. 130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 140.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone fib. dms., works, 100% basis lb. 10.00 - —
resin, 25-45%, fib dms., works, 30% basis lb. 3.00 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03 - —
ton lots same basis lb. .04 - —

Dow

NOW AVAILABLE!

soda ash

(58% light)

BY DOW

Ready for your needs . . .

A high-quality and uniform *soda ash* . . .

Produced by an exclusive new Dow process at Freeport, Texas.

Include Dow in your planning.

THE DOW CHEMICAL COMPANY, Midland, Michigan

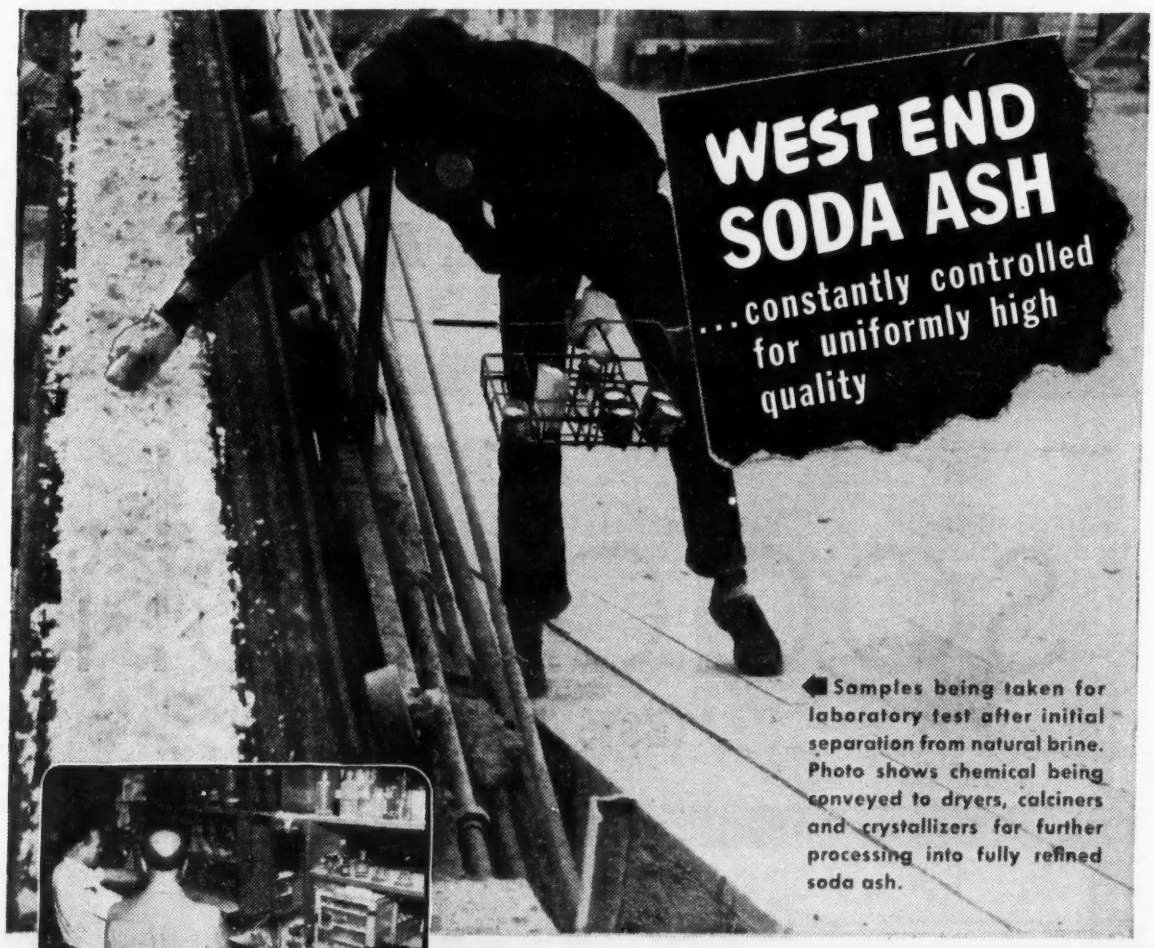
you can depend on DOW CHEMICALS DOW

Rutin—Sodium Metabisulfite

Rutin, NF, fib dms.. 25-kilo lots, kilo.17.50 -18.50
10 to 25-kilo lots..... kilo.17.50 -20.00
1 to 10-kilo lots..... kilo.18.90 -20.00
Ryania, 100% powd., bgs., c.l., works. lb. .22 - —
l.c.l., same basis ..... lb. .24 - —

S

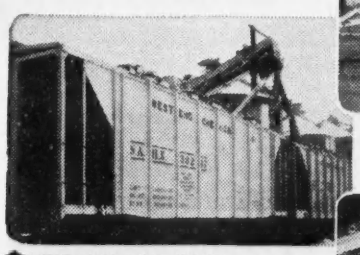
Sabadilla seed, powd., bbls .... lb. .49 - 49½
activated, ground with lime, bbls lb. .30 - .32
Saccharin, USP, cryst., soluble, dms., 1000-lb lots lb. 1.60 - —
smaller lots ..... lb. 1.70 - 1.80
powd., soluble, insoluble, dms., 1000-lb. lots lb. 1.65 - —
smaller lots ..... lb. 1.75 - 1.95
Saffron, Spanish, USP, tins..... lb.35.00 -40.00
Safrol, dms ..... lb. 1.60 - —
Sage, Cretan, bgs..... lb. .11 - —
Dalmatian, bgs. ..... lb. .44½- —
Italian ..... lb. .22 - —
Sago flour, raw, bgs..... lb. .06¾- .07
refd., bgs..... lb. .08½- .08¾
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms..... lb. 1.00 - —
Salol, NF, gran., bbls., kgs.... lb. 1.15 - —
Powdered salol, 25c. higher.
Salt, rock, paper bgs., c.l.....100 lbs. .99 - —
table, vacuum, common, fine, paper bgs, c.l..100 lbs. 1.17 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis..ton.28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 - .66
powd., fib. dms .... lb. .75 - .76
Sarsaparilla root, imp., Honduras, bls. lb. .58 - .62
Mexican, bls. ..... lb. .38 - .62
Sassafras root bark, ord., bls.... lb. .45 - —
select, bbls. ..... lb. .65 - —
Schaeffer's salt, paste, dms., frt. alld., 100% basis lb. .95 - —
powd., bgs., frt. alld., 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots..oz.17.40 - —
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½- —
smaller lots ..... lb. .31 - .32
Selenium, powd., dms., dlvd..... lb. 6.00 - 7.50
Senega root, bls..... lb. 2.35 - —
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings ..... lb. .17 - —
Tinnevelly, No. 1, bls..... lb. .16 - .18
No. 2, bls. ..... lb. .13 - .15
No. 3, bls. ..... lb. .11 - .13
powdered, bbls., bxs..... lb. .18 - —
pods, bls. ..... lb. .14 - —
Serpentaria root, bls ..... lb. 4.95 - —
Sesame seed, Egyptian, nat..... lb. .16¾- —
hulled ..... lb. .21 - —
Nicaragua, hulled, shipt., bgs..lb. .26 - —
nat., bgs. ..... lb. .18 - —
Salvadorian, natural ..... lb. No prices.
Syrian, bgs., natural..... lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots..lb. .58 - —
bbls., 1,500-lb. lots ..... lb. .60 - —
kgs., 1,500-lb. lots..... lb. .61 - —
Shellac, bleached, bonedry, refd., bgs., 1,500-lb. lots..... lb. .66 - —
bbls., 1,500-lb. lots ..... lb. .68 - —
kgs., 1,500-lb. lots..... lb. .69 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots..lb. .53 - .55
No. 2, bgs., 10-bag lots ..... lb. .51 - .53
Superfine, bgs., 10-bag lots.... lb. .50 - .51
TN, bgs., 10-bag lots..... lb. .49 - .50
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works..ton.25.00 - —
l.c.l., works, exwnse...ton.45.00 -55.00
hard-quartz, 99½, 325 mesh, bgs, c.l., works..ton.20.00 - —
l.c.l., works..... ton.25.00 -30.00
140 mesh, bgs., c.l., works. ton.15.00 - —
l.c.l., works..... ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works. lb. .16 - —
l.c.l., works ..... lb. .20 - .28½
Silver bullion, ingots, cs.... Troy oz. .91⅞- —
Cyanide, fib. dms., 2,500-oz. lots, oz. .82⅜- —
1,000-oz. lots ..... oz. .82¾- —
500-oz. lots ..... lb. .82⅞- —
100-oz. lots ..... lb. .83⅛- —
Nitrate, CP, cryst., bots., 2,500-oz. lots..oz. .58⅜- —
1,000-oz. lots ..... oz. .60⅛- —
500-oz. lots ..... oz. .60⅜- —
250-oz. lots ..... oz. .60⅞- —
USP granular silver nitrate 4c. per oz. higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots .. oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls..... lb. .45 - —
crushed, bls., bbls..... lb. .55 - —
powd., bbls ..... lb. .55 - —
Soda ash, dense, 58%, paper bgs., c.l., works..100 lbs. 1.80 - —
l.c.l., stock points..100 lbs. 2.90 - 4.67
bbls., c.l., works ...100 lbs. 2.40 - —
l.c.l., stock points...100 lbs. 3.55 - 4.22
bulk, c.l., works ..100 lbs. 1.50 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.75 - —
l.c.l., stock points..100 lbs. 3.85 - 4.62
bbls., c.l., works ...100 lbs. 2.30 - —
l.c.l., stock points..100 lbs. 3.35 - 5.62
bulk, c.l., works....100 lbs. 1.45 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald..100 lbs. 4.50 - —
l.c.l., stock points..100 lbs. 5.60 - —
liq., 50%, sellers, tanks, works, dry basis..100 lbs. 2.80 - —
rayon type, sellers' tanks, works, dry basis..100 lbs. 2.80 - —
70%, sellers' tanks, works, dry basis..100 lbs. 2.90 - —
rayon-type, sellers' tanks, works, dry basis..100 lbs. 2.90 - —
solid, 76%, dms., c.l., works. 100 lbs. 4.10 - —
l.c.l., stock points..100 lbs. 5.30 - —
Sal., conc., bgs., c.l., works.100 lbs. 2.30 - —
smaller lots, works... 100 lbs. 2.60 - —
Sodium acetate, anhyd., bgs., c.l., works lb. .12 - —
dms., c.l., works... lb. .12¾- —
NF, 60% gran., dms., c.l., works lb. .12½- —
l.c.l., works lb. .14 - —
Alginate, NF, white powd., dms., ton lots, works lb. .87 - 1.30
refd., bbls., works lb. .83 —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 - —
smaller lots lb. 2.45 - 2.50
p-Aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted. lb. 3.75 - —
smaller lots, same basis lb. 3.80 - 4.25
Antimoniate, bbls., c.l., dlvd E. lb. .28 - —
l.c.l., dlvd. E..... lb. .29½- —
Arsenate, dms., c.l., works.... lb. .12½- —
l.c.l., works..... lb. .13¾- .14¾
Arsenite, dms., c.l., works.... lb. .12¼- —
l.c.l., works..... lb. .13 - .14½
soln., dms., works..... gal. .59 - .67
Ascorbate, dms., 25-50 kilo lots kilo.16.00 - —
10-kilo lots..... kilo.16.35 - —
5-kilo lots..... kilo.16.75 - —
1-kilo lots..... kilo.17.00 - —
bots., 500-gram lots ..... kilo.17.50 - —
Benzoate, tech., bbls., dms., 100-lb lots or more lb. .39 - —
USP, bbls., dms., 100-lb. lots, or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works..100 lbs. 2.80 - —
l.c.l., works.....100 lbs. 3.55 - —
powd., bgs., c.l., works.100 lbs. 2.40 - —
l.c.l., works.....100 lbs. 3.15 - —
Bichromate, bgs., c.l., works...lb. .12¼- —
l.c.l., works..... lb. .12¾- .13¼
Bifluoride, bbls., c.l., works, frt. equaled lb. .17½- —
l.c.l., same basis lb. .1790- —
Bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald..100 lbs. 3.00 - 3.60
l.c.l., frt. equald....100 lbs. 3.50 - 4.10
Bisulfite, anhyd., bgs., c.l., works. 100 lbs. 4.50 - —
l.c.l., works..... 100 lbs. 4.90 - —
soln., 35°, bbls., c.l., works. 100 lbs. 1.55 - —
l.c.l., works.....100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., works....lb. .36 - —
Carbonate, anhyd. (see Soda ash).
cryst., monohydrated (see Soda, sal).
monohydrated bgs., c.l., works. 100 lbs. 3.00 - —
l.c.l., works.....100 lbs. 3.40 - —
Carboxymethyl cellulose (see CMC).
Chlorate, cryst., dms., c.l., works. lb. .09 - —
l.c.l., works..... lb. .10½- .11¼
Chloride, tech. (see Salt).
USP, bgs. ..... lb. .05 - .12
Chlorite, tech., dms., c.l., works. lb. .58 - —
20-ton lots or more, works. lb. .66 - —
smaller lots, works .... lb. .70 - .73
Chloroacetate, tech., dms., c.l., works. lb. .27 - —
l.c.l., works ..... lb. .28 - —
Chromate, dms., c.l., works....lb. .13¼- —
l.c.l., same basis..... lb. .13¾- .15
Citrate, anhyd., dms. .....lb. .60 - .65
NF VIII, gran., dms.....lb. .26 - .30¼
USP, XVI gran., dms.....lb. .29½- .34
Sodium citrate, USP, powd. prices ½c. higher.
Cyanate, dms., 1,000-lb. lots, works..lb. .85 - 1.10
smaller lots works lb. 1.00 - 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots..lb. .178 - —
over 1,000-lb. lots ..... lb. .188 - —
100-lb. to 1,000-lb. lots lb. .198 - —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 - —
l.c.l., works..... lb. .14¾- —
anhyd., dms., c.l., works....lb. .17 - —
l.c.l., works..... lb. .17¾- —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots. lb. .13½- —
smaller lots ..... lb. .14 - —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald..lb. .1250- —
l.c.l. works ..... lb. .1290- —
Formate, bgs., c.l., works..... lb. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Gentisate, 100-lb. fib. dms.....lb. 8.50 - —
Gluconate, refd., dms. .....lb. .80 - .83
tech., dms ..... lb. .35 - —
Glutamate, mono-, dms., c.l....lb. 1.55 - —
Hydride, dms., works .....lb. 1.40 - 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld.lb. .22 - —
l.c.l., frt. alld..... lb. .22½- —
Hydroxide, tech. (see soda caustic).
NF, pellets, 100-lb dms., 1 to 100-dm. lots lb. .18½- .33
Hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, USP (see Sodium thiosulfate).
pea crystals, bgs.....100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
photo grade, bgs., c.l., works. 100 lbs. 4.50 - 4.75
l.c.l., works .....100 lbs. 5.00 - 5.05
tech., bgs., works.....100 lbs. 4.50 - —
l.c.l., works .....100 lbs. 4.90 - 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms.....lb. 2.55 - 2.62
Lactate, edible, 50%, cbys., dms., works. lb. .21½- —
60% cbys., dms., works.. lb. .26½- —
tech., 50%, cbys., dms., works, lb. .16½- —
Lauryl sulfate, dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd..... lb. .23 - —
tanks, dlvd..... lb. .20 - —
Metabisulfite (see Sodium bisulfite).



Samples being taken for laboratory test after initial separation from natural brine. Photo shows chemical being conveyed to dryers, calciners and crystallizers for further processing into fully refined soda ash.

Many laboratory tests are made of the product during chemical processing from natural brine to finished soda ash.

PERSONAL SERVICE — Customers anywhere in the West are only a few hours away by company plane.



IMMEDIATE SHIPMENT to customers throughout the West in company's own leased hopper cars . . . ready at all times.

30 MINUTE IN-AND-OUT LOADING for bulk trucks at any hour of day or night through "serve yourself" delivery.

West End is a pure white, free-flowing and rapidly soluble soda ash that produces a far cleaner, more uniform product. In continuous production, it is available at all times in fully adequate quantities for the normal and emergency needs of western customers. Fast, economical transport by rail or truck to any point in the West.

WEST END CHEMICAL COMPANY
SODA ASH • BORAX • SODIUM SULFATE
SALT CAKE • HYDRATED LIME

Write for samples, prices and technical data.

West End Chemical Co.

Executive Offices: Nineteen Fifty-Six Webster Bldg., Oakland 12, California • Plant: Westend, California

Sodium metaborate, octahydrate, gran., bgs., c.l., works ton.85.00 - —
l.c.l., ex whse ton.135.50 -140.50

Sodium metaborate, octahydrate in bbls., $24.50 per ton higher

Tetrahydrate, bbls., c.l., works ton.199.50 - —
Metallic, bricks, 14,000-lb. lots or more, works lb. .17 - .19
less than 14,000-lb. lots, works lb. .173 - .193
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.10 - —
l.c.l., works 100 lbs. 5.45 - 7.35
dms., c.l. 100 lbs. 5.50 - —
l.c.l. 100 lbs. 5.85 - 7.75
Pentahydrate, bgs., c.l., works. 100 lbs. 4.10 - —
l.c.l., works 100 lbs. 4.45 - 6.35
dms., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 5.10 - 5.85
Molybdate, bbls., cbys., works lb. .85 - .95
anhd., cryst., dms., works lb. .70 - —
powd., dms., works lb. .85 - .92
Monohydrate (see Sodium carbonate, monohydrated).
Naphthionate, bbls. lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works ton.47.00 - —
bulk, c.l., works ton.43.50 - —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton.51.25 - —
bulk c.l., same basis ton.47.75 - —
Nitrite, USP, bbls., c.l., works, frt. equaled lb. .08 - —
l.c.l., same basis lb. .09½ - —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.00 - 6.30
l.c.l., works 100 lbs. 6.35 - 6.95
hydrated, flake, bbls., c.l., works. 100 lbs. 5.25 - —
l.c.l., works 100 lbs. 7.00 - —
Oxalate, 88%, bgs., works 100 lbs.10.85 - —
Para-aminobenzoate (see sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate)
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½ - —
l.c.l. same basis lb. .28½ - .28½
pellets, bgs., c.l., same basis lb. .25 - —
l.c.l., same basis lb. .26 - .28
powd., bgs., dms., c.l., same basis lb. .24 - —
l.c.l., same basis lb. .25½ - .32

Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.

Perborate, NF, tech., bgs., c.l., works lb. .173 - —
l.c.l., works lb. .178 - —
Peroxide, dms., c.l., dlvd. E. of Miss. lb. .1860- —
l.c.l., same basis lb. .1910- .1960
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.45 - —
l.c.l., works 100 lbs. 7.85 - —
USP, dried powd., bgs., dms., works lb. .19 - .20½
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.90 - —
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.20 - —
l.c.l., frt. equald 100 lbs. 7.60 - —
tribasic, anhyd., bgs., c.l., l.c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.85 - —
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.20 - —
l.c.l., frt. equald 100 lbs. 4.60 - —

Sodium phosphates in dms., 60c. higher than bgs.

Prussiate, yellow (see sodium ferrocyanide)
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.10.60 - —
ferric, dms., 1,500-lb. lots, works. lb. .38½ - —
smaller lots, works lb. .41½ - .43½
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.37½ - —
l.c.l., frt. equald 100 lbs. 7.77½ - —
Salicylate, USP, dms lb. .71 - .74
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.25 - —
l.c.l., dlvd., zone 1 100 lbs. 4.00 - 4.25
zone 2 100 lbs. 4.25 - 4.50
zone 3 100 lbs. 4.65 - 4.80
zone 4 100 lbs. 5.25 - 5.50

Sales zones are: (1) All States E. of Miss. R. and N. of south bound. of Ky. and Va.; Ala., La., and Miss., south of 31° Tex E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia. and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn.; Mo. (except St. Louis), Neb., E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sesquisilicate, hydrated, bgs., c.l., zone 1, dlvd. ton.120.00 - —
l.c.l., works 100 lbs. 4.95 - 5.35
dms., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - 5.75
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs. 1.70 - 2.20
tanks, works 100 lbs. 1.00 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 1.95 - —
l.c.l., dms., works. 100 lbs. 2.55 - 2.80
tanks, works 100 lbs. 1.60 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.30 - —
l.c.l., works 100 lbs. 2.65 - 3.15
tanks, works 100 lbs. 1.95 - —
solid, 1:3.2, bgs., works ton.37.50 - —
Silicofluoride, bgs., c.l., works lb. .075 - —
l.c.l., works lb. .079 - —

Sodium silicofluoride in dms., 4.10c higher

Stannate, dms., works, frt. alld. E lb. .557 - .611
Sulfa drugs (see Sulfa name)
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½ - —
tech., anhyd., bgs., c.l., dlvd., E ton.52.00 - —
detergent grade, bgs., c.l., works ton.34.00 - —
rayon grade, bgs., c.l., works. ton.31.00 - —
USP cryst fib dms lb. .17½ .18
gran., fib. dms lb. .17½ .18

Sodium sulfide, flake, dms., c.l., works, E. frt. equald. lb. .05¼ - —
l.c.l., same basis lb. .05¾ - —
fused, bbls., c.l., works, E., frt. equald lb. .04¾ - —
l.c.l., same basis lb. .05¼ - —
Sulfite, anhyd., bgs., c.l. 100 lbs. 3.00 - —
l.c.l. same basis 100 lbs. 3.50 - —
powd., bbls., c.l., works 100 lbs. 7.25 - —
l.c.l., works 100 lbs. 7.50 - —
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06½ - —
l.c.l., works lb. .07 - —
liq., 40-44%, tanks, works, 100% basis ton.110.00 - —
Sulfocyanide, CP, (see Sodium thiocyanate).
Tetraborate (see Borax).
Tetrasulfide, liq., 40% dms., c.l., works lb. .03½ - —
l.c.l. works lb. .04 - —
Thiocyanate, CP, dms lb. .53 - .65
tech., anhyd., 1 ton lots or more, works lb. .317 - —
less than ton lot works lb. .337 - —
Thiosulfate, NF, cryst., bbls lb. .12½ - —
tech (see Sodium hyposulphite).
Titanate, ctns., c.l., works lb. .10½ - —
5-ton lots, works lb. .10¾ - —
1-ton or less, works lb. .11 - —
Toluene sulfonate, dms., c.l., or t.l. lb. .38 - —
l.c.l. lb. .42 - —
Trichloracetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½ - —
l.c.l., frt. adjusted, E lb. .39½ - —
50 lb. dms., c.l., frt. alld E. lb. .38 - —
l.c.l., frt. adjusted E lb. .40 - —
10-lb. cns., c.l., frt. alld. E. lb. .44 - —
l.c.l., frt. adjusted E lb. .46 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium Metaborate, Octahydrate—Stannous Sulfate

Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.72½ - —
l.c.l. same basis 100 lbs. 8.12½ - —
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
l.c.l., works 100 lbs. 9.40 - 9.80
dms., c.l., works 100 lbs. 9.05 - —
l.c.l., works 100 lbs. 9.80 - 10.20
Tungstate, tech., kgs. dlvd E lb. 1.80 - —
Sodium-ammonium phosphate bbls., works, frt equald lb .23 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium cinchophen (see Cinchophen sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
l.c.l. same basis lb. .21½ - —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb. lots or more works lb. .28 - —
smaller lots same basis lb .30 - —
Solvent naphtha, coaltar high flash, tanks, works gal. .31 - .35
petroleum (see Petroleum) solvent, partial aromatic)
Sorbitan monostearate, fib. dm., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots works lb. .37 - .39
Tristearate, fib. dms. 20,000-lb. lots works lb. .33 - —
10,000 to 20,000-lb lots works. lb. .35 - —
smaller lots works lb .32 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works lb. .25 - .26
powd., dms., 1- to 5-ton lots, works, lb. .38 - .39
Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .24¼ - —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼ - —
tanks, works lb 23¼ - —
reg., 70%, aqueous, dms., c.l., works lb. .16 - —
ton lots works lb. 16¾ - —
smaller lots, works lb. 17 - —
tanks, works lb 15 - —
Soybean meal, 44%, bulk, Decatur ton.59.00 - —
protein, chemically isolated, bgs., c.l., works lb 23 - —
mechanically refd., bgs., c.l., works lb 96 - —
Sparteine sulfate, ens oz. .80 - .85
Spearmint leaves, dom. bls lb. 75 - —
Spruce extract, liq., reg. tanks, works lb. 01¾ - —
powd. super bgs., c.l., works. lb. 05¼ - —
l.c.l works lb 05½ - —
Squill, white, bls lb. .17 - .19
powd., bbls. bxs lb 18 - 21
St John's bread edible bls lb. 13 - 15
Stannic chloride, anhyd., dms., works lb. .771 - .781
Oxide, dms., dlvd. E lb. .98 - .99
Stannous chloride, anhyd., dms., works lb. .830 - 1.049
Hydrous, cryst., dms., works. lb. .781- .791
Sulfate, dms., works lb. .947 - .967

Sodium Tripolyphosphate

Tetrasodium Pyrophosphate
ANHYDROUS

Sodium Polyphos
(SODIUM HEXAMETAPHOSPHATE)
(SODIUM TETRAPHOSPHATE)

Trisodium Phosphate
CRYSTALLINE
MONOHYDRATE

Sodium Phosphates

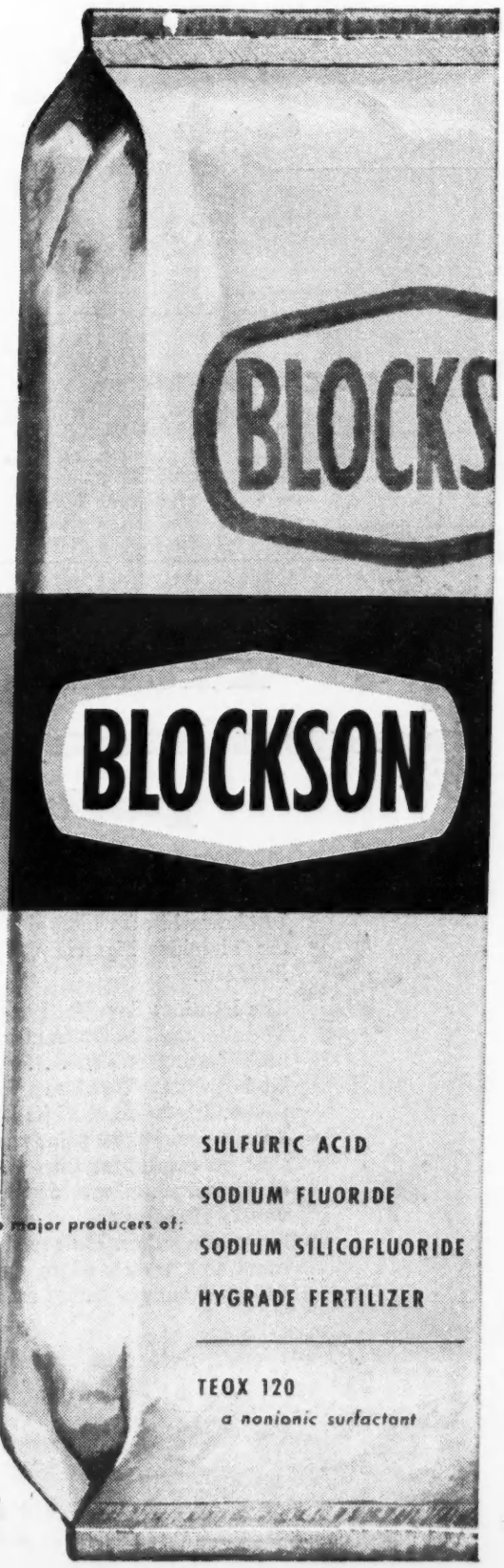
Trisodium Phosphate
Chlorinated

Disodium Phosphate
ANHYDROUS
CRYSTALLINE

Monosodium Phosphate
ANHYDROUS
MONOHYDRATE

Sodium Acid Pyrophosphate

BLOCKSON CHEMICAL COMPANY
Division of Olin Mathieson Chemical Corporation
JOLIET, ILLINOIS



also major producers of:
SULFURIC ACID
SODIUM FLUORIDE
SODIUM SILICOFLUORIDE
HYGRADE FERTILIZER

TEOX 120
a nonionic surfactant

Starch, Corn—Titanium Dioxide

Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.13 - —
l.c.l. 100 lbs. 7.28 - —
powd., paper bgs., c.l. 100 lbs. 7.25 - —
l.c.l. 100 lbs. 7.40 - —
Prices for corn starch in cotton bags, 25c per 100 lbs higher.
Potato, dom., Idaho, bgs., c.l., works lb. .06¾- —
Maine, bgs., c.l., works lb. .0565- .05¾
ex whse, N. Y. lb. .08 - .08¼
Rice, bgs., l.c.l. lb. .15½- .16
Wheat bgs. lb. .0755- 0780
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. 60 - .61
Stearine oleo (see Oleostearine).
Stomach substance, not USP, 100-lb. fib. dms lb. 2 80 - —
Stramonium leaves, bgs lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .063 - .07
Strontium bromide, NF, cns. dms. lb. .75 - .84
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb .46 - —
Iodide, jars, 25-lb. lots lb. 3.42 - —
Nitrate, bbls., c.l., works 100 lbs.11.00 - —
l.c.l., works 100 lbs.12.00 - —
Salicylate, NF, dms lb. 1.75 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin, K, bots oz.25.00 -25.50
G. (see Quabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 3.75

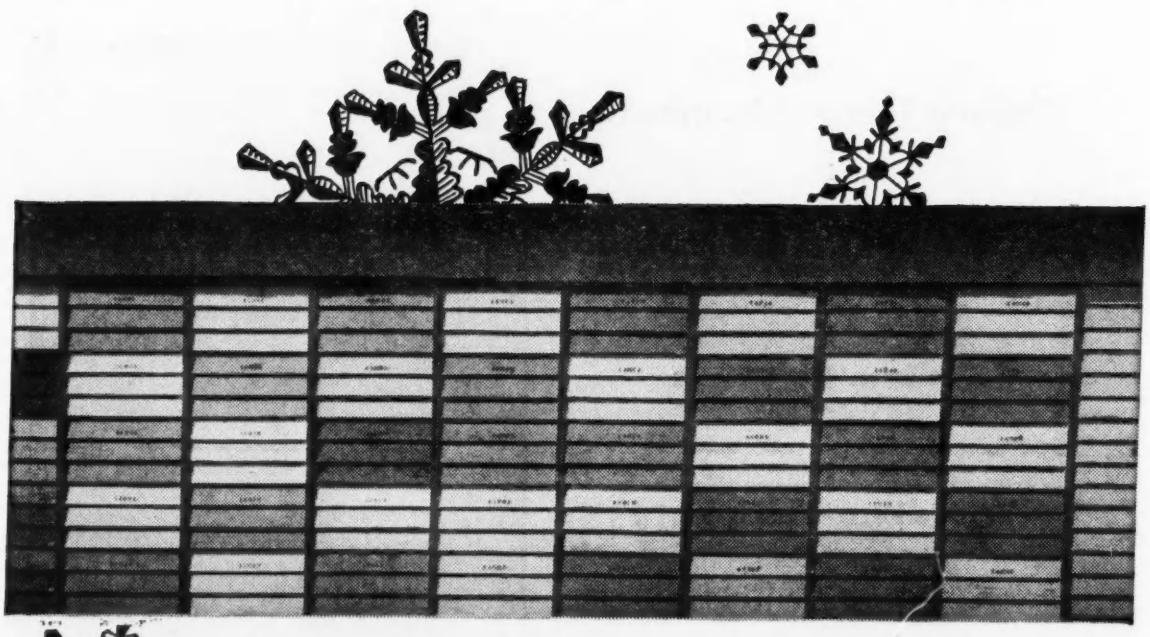
Strychnine, NF, powd., cns., 10-oz. lots oz. 1.10 - —
Phosphate, NF, cns., 100-oz. lots.oz. 1.14 - —
Sulfate, USP, cryst., cns., 25-oz. lots oz. .96 - —
powd., 100-oz. lots oz. .85 - —
Styrax, USP, cs lb. .78 - .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
l.c.l., same basis lb. .23½- —
tanks, same basis lb. .20½- —
synthetic rubber grade 99%, dms., c.l., frt. alld lb. .19 - —
l.c.l., same basis lb. .20 - —
tanks, same basis lb. .17 - —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, crude, bgs., divd., N. Y. lb. .0555- —
refd., white, bgs., refy., E lb. .0855- —
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
Sodium fib. dms lb. 5.00 - 5.20
Sulfadiazine, USP, microcrystals, dms lb.10.60 -11.10
powd., dms lb.10.25 -10.75
Sulfadiazine-sodium, USP, dms lb.11.25 -11.75
microcrystals, dms. lb.11.60 -12.10
Sulfaguanidine, USP dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals, lb.10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb.11.25 -11 75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms lb. 8.50 - 9.00

Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms. lb. 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfapyridine, NF, powd., bots., tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, USP, microcrystals, dms. lb. 2.85 - 3.00
powd., dms lb. 2.50 - 2.65
Sulfathiazole-sodium, USP, dms lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines 100 lbs. 2.30 - —
bbls., mines 100 lbs. 3.05 - —
lump, bgs., mines 100 lbs. 2.20 - —
bbls. mines 100 lbs. 2.65 - —
crude, bulk, c.l., mines, contract, long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.31.00 -33.00
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 -29.50
refd., flowers, USP, bgs., mines. 100 lbs. 4.00 - —
bbls. 100 lbs. 5.25 - —
flour, light, bgs., mines 100 lbs. 3.60 - —
bbls., mines 100 lbs. 4.50 - —
lump, bgs., mines 100 lbs. 3.30 - —
rolls, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.40 - —
salt block, bgs., mines 100 lbs. 3.50 - —
virgin block, bbls., mines 100 lbs. 3.45 - —
rubbermakers, coml., reg., bgs., mines 100 lbs. 2.40 - —
bbls., mines 100 lbs. 3.55 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.50 - —
bbls., mines 100 lbs. 3.65 - —
refd., bgs., mines 100 lbs. 3.25 - —
bbls., mines 100 lbs. 4.30 - —

Sulfur, rubbermakers, treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.70 - —
bbls., mines 100 lbs. 3.85 - —
10% pine tar, bgs., mines. 100 lbs. 3.90 - —
Dichloride, dms., c.l., works, frt. equald lb. .03¾- —
l.c.l., same basis lb. .04½- —
tanks, same basis lb. .03½- —
Dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., dlvd lb. .27 - —
Monochloride, 55-gal., dms., c.l., frt. equald lb. .03¾- —
l.c.l., same basis lb. .04½- —
tanks, same basis lb. .03½- —
Sumac leaves, 28%, bgs., ex-dock, ton.132.00 - —
ground, bgs., ex-dock ton.127.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 - .91
Carteret, N. J. unit-ton. .88 - .91
triple, 48% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton. .98 - —

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 - —
l.c.l., same basis lb. 1.30 - 2.30
Isopropyl ester, dms., c.l., works, frt. equald lb. 1.30 - —
l.c.l., works lb. 1.35 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton.32.00 -38.50
Vermont off color grd., bgs., c.l., works ton.18.40 - —
l.c.l., works ton.36.00 - —
fibrous, New York, grd., bgs., c.l., works ton.27.00 -32.00
l.c.l., works ton.30.00 -35.00
99.5%, 325 mesh, bgs., c.l., works ton.30.00 - —
l.c.l., works ton.33.00 - —
99.95% micronized, bgs., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 35 00
Tallow, edible, tanks, dlvd lb. .10 - —
inedible, extra, tanks, dlvd lb. .08½- —
fancy, bleachable, tanks, dlvd., lb. .08⅜- —
guaranteed, dms., f.a.s lb. .09⅜- —
No. 1, tanks, dlvd lb. .07½- —
special tanks, dlvd lb. .07⅜- —
sulfonated, 25%, bbls., l.c.l. lb. .08¾- .08⅞
50%, bbls., l.c.l. lb. .09½- .10¼
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 5.25 - —
Chicago unit-ton. 6.00 - —
Tapioca flour, Brazilian, bgs., ex whse. lb. .07¾- .08¼
Siamese, top grade, bgs., ex whse. lb. .07½- .07¾
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l. same basis. gal. .70 - .72½
l.c.l., same basis gal. .73½- .74½
tanks, same basis gal. .62½- —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartrate).
Terpine glycol ether, dms., c.l., works lb. .23½- —
l.c.l., works lb. .25½- —
tanks, works lb. .22 - —
Hydrate, NF, cryst., powd., fib. dms. lb. .67½- .74
a-Terpineol, dms., l.c.l., dlvd E lb. .20¾- —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms. lb. 1.75 - 2.00
Terra alba, (see Gypsum).
Testosterone, USP, 100-gm. lots, bots. gram. .70 - —
Propionate, USP, 100-gm. lots, bots. gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works lb. .20½- .21⅛
smaller dms., works lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
l.c.l., dlvd. E lb. .62½- —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrapotassium phosphate (see Potassium phosphate).
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Thallium metal, dlvd lb.12.50 -15.00
Sulfate, 99%, bots., dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms lb. 4.00 - —
And sodium acetate, USP, fib. dms. lb. 4.20 - —
Sodio-Salicylate, NF, fib. dms. lb. 3.50 - —
Theophylline, anyhd. or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms. kilo.80.00 - —
Mononitrate, USP, fib. dms. kilo.80.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
less tons lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., dms., c.l., works. lb. .36 - —
l.c.l., works lb. .38 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo lots. kilo.450.00 -500 00
Thyme leaves, French, bgs lb. .20 - .22
Spanish, bgs. lb. .09½- —
Thymol, fib. dms lb. 2.50 - 2.65
Iodide, NF, dms lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Metal (Straits) lb. .96½- —
Oxide (see Stannic oxide).
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk resistant, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
ceramic, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
reg., bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd lb. .23½- —



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Just how white *is* white? Here's where the Titanium Pigment Corporation finds out!

The location: Sayville, Long Island. The site: the 20-acre tract of Titanium's Testing Station . . . first of its kind to test titanium pigmented paints. It's foremost of its kind, too. As many as 30,000 paint panels at a time get the full treatment. All types of formulations are applied to a variety of surfaces . . . and are left to face the weather. How well do they stand up? Which white paints *stay* white? Titanium knows most of the answers. It's constant testing like this that helps us help you make longer-lasting, more durable whites. (And that goes for tinted paints, too.)

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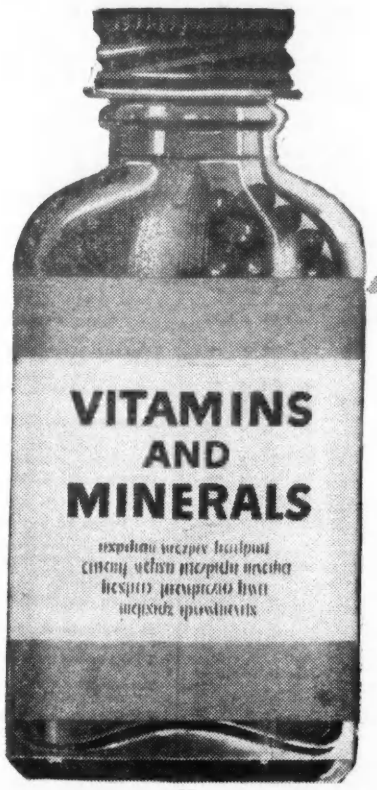

the increasing trend toward this combination

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The public—prompted by recent medical findings—wants preparations that supplement the diet with *minerals* as well as vitamins. As a vitamin user, you already know the meaning of Pfizer quality...a standard that has helped make this company a leader in vitamin production and research over the past eighteen years. This standard has also been applied to the manufacture of Pfizer Gluconates and Citrates...non-toxic, well-tolerated metal carriers.

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Pfizer Citrates offer you economical, mild, organic carriers for metallic ions. On a milligram-for-milligram comparison, they carry more metallic ion than other organic salts. This concentration helps you keep your tablet or capsule compact.

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Titanium Dioxide—Vitamin A Palmitate

Titanium dioxide anatase, metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton.120.00 - —
Niagara Falls, N. Y., c.l., ton 137.50 - —
5-ton lots ton.142.50 - —
ton lots, c.l. ton.147.50 - —
rutile, nonchalking, bgs., c.l., dlvd. E lb. .24½- —
t.c.l. dlvd. E lb .24½- —
Milled titanium dioxide $7.50 per ton higher.
Hydride, cns., works lb. 7.95 9.00
Pigment, calcium-rutile base, bgs., c.l., dlvd lb. .08¾- —
t.c.l. dlvd lb. .08¾- —
Tetrachloride, tech., dms., c.l., works lb. .40¾- —
t.c.l. works lb 43¾- —
tanks, works lb. .39¾- —
dl-a-Tocopherol, bots kilo.149.65 - —
Acetate, bots kilo.136.00 - —
o-Toluidine base dist., kgs lb 1.30 - —
Tolu balsam cns lb 4.25 4.50
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
m-Toluidine dms. c.l. works, frt. alld lb. .79 - —
t.c.l. same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine dms. c.l. works, frt. alld lb. .23 - —
t.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld. lb. .60 - .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago dist gal. .35 - —
Cleveland dist. gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa. gal. .32 - —
Lackawanna, N Y gal. .35 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½- —
Minnequa, Colo. gal. .32 - —
Philadelphia district gal. .34 - —
Pittsburgh dist gal. .32 - —
Sparrow's Point, Md gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32 - —
petroleum, indust., 2° tanks, works:—Albany, N. Y. gal. .35 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich. gal. .35 - —
Houston, Tex. gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .25 - —
2-4 Tolylenediamine, cryst., fib. dms., frt. alld lb. .94 - —
powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks. lb. 1.65 - 1.80
Brazilian, Surinam, cs lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .20 - —
t.c.l., l.t.l., works lb. .26 - —
Triacetin, dms., c.l., dlvd. E, of Rockies lb. .39 - —
t.c.l. same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret, dms., c.l., frt. alld. E, of Denver lb. .42 - —
t.c.l., frt. alld. E. of Denver. lb. .43 - —
tanks, frt. alld. E. of Denver. lb. .40 - —
Phosphate, dms., c.l., works lb. .52 - —
t.c.l. same basis lb. .53 - —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67 - —
t.c.l., same basis lb. .68 - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., works, frt. alld. E lb. .14½- —
t.c.l., frt. alld. E lb. .15½- —
tanks, frt. alld. E lb. .13 - —
Prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .11¾- —
t.c.l., dlvd. E lb. .13¾- —
tanks, works, frt. equald lb. .10¾- —
Trichloroethane, dms., c.l., works. lb. .15 - —
t.c.l., works lb. .13½- —
tanks, works lb. .11½- —
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
t.c.l. dlvd. lb .36 - —
tanks, dlvd. lb. .33 - —
petroleum, dms., c.l., dlvd lb. .35 - —
t.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .33 - —
Triethanolamine, dms., c.l., dlvd. E lb. .24 - —
t.c.l., same basis lb. .25 - —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt. alld. E, of Denver lb. .45¾- —
t.c.l., frt. alld. E. of Denver. lb. .46¾- —
tanks, frt. alld. E. of Denver.. lb. .43¾- —
Phosphate, dms., c.l., works. lb. .38 - —
t.c.l., same basis lb. .39 - —
tanks, same basis lb. .37 - —
Triethylene glycol, dms., c.l., dlvd. E. lb. .20½- —
t.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .49 - —
t.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .22¾- —
t.c.l., dlvd. E lb. .23¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine, 25-30% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 - —
t.c.l., works, frt. equald., 100% basis lb. .42½- —
tanks, works, frt. equald., 100% basis lb .33 - —
Trioxane, pure, dms., c.l., t.l., dlvd. E lb. .50 - —
t.c.l., dms., dlvd. E lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 - —
t.c.l., frt. equald lb. .41 - —
Triphenylguanidine, bbls. works in. .90 - —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½- —
t.c.l., frt. alld. E lb. .21½- —
Prices 1c. per lb. higher in West.
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical, 1:75, dms., works lb. 6.25 - —
dl-Tryptophane, fib. etns., works. kilo.165.00 - —
Tungsten metal, powd., 98.8%, dms., dlvd lb. 4.35 - 4.40
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gram. .75 - .85

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.120.00 - —
l.c.l., dlvd. E, ex whse. ton.140.00 - —
45% N, agricultural, bgs., c.l., (30 tons), dlvd. E ton.105.00 - —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va. ton.126.00 - —
C grade, tankcars, same basis, ton.124.50 - —
37 grade, tankcars, same basis ton.153.00 - —
Urethane, USP, dms. lb. 1.50 - —
Uva ursi leaves, bls. lb. .12 - .14

V

Valerian root, Belgian, bgs. lb .38 .40
dl-Valine, dms., works lb.21.00 27.50
Valonia beards, 40-42% tannin, bgs., exdock ton.70.00 - —
cups, 28-30% tannin, bgs., exdock ton.50.00 - —
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .07¾- —
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 6.50 - 7.00
Mexican, cuts, tins lb. 7.75 - —
whole, tins lb. 8.50 - —
Tahiti, cs. lb. 6.00 Nom.
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex lignin, dms., 25-lb. lots lb. 3.00 - —
smaller lots lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
t.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .26 - —
t.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, frt. equald lb. .10½- —
Ether, USP, anesthesia, bots., 50 c.c., hospitals, bot. 1.12 - —
75 c.c. bot. 1.56 - —
Ethyl ether, tech., dms., c.l., works. lb. .26 - —
t.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
t.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb. .20 - —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.40 1.50
Vinyltoluene, dms., c.l., frt. alld. lb. .19¼- —
t.c.l., frt. alld. lb. .20¼- —
tanks, frt. alld. lb. .18 - —
Viosterol, in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units, 1,000,000 units. .035 - —
in nat., vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02 - .04¼
lots of 1 billion USP units, 1,000,000 units. .025 - .05¼
lots of less than 1 billion USP units, 1,000,000 units. .03 - .05¾
Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo.67.50 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram, 1,000,000 units. .10 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .10 - —
in oil, 1,000,000 A units per gram, 1,000,000 units. .10 - —

MAKES IT EASIER TO MAKE
HARDER NO-RUB POLISHES

Petrolite

WAX-RESIN BLEND R-50

SPECIFICATIONS

ACID NO.	SAP. NO.	R & B S.P.-°F	COLOR, NPA	PEN 100/5
40-50	65-80	190-200	4½ Max	2 Max

R-50 is a blend of Petrolite-developed, high melting, phenolic terpene resin and oxidized microcrystalline wax. Suitable for use in all emulsion equipment, it eliminates the nuisance of wax-resin blending. It simplifies raw material stocking. Being highly compatible, it is adaptable to many no-rub formulations.

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WAX DIVISION
Chrysler Building, New York 17, N. Y. • P. O. Box 390, Kilgore, Texas

R8-50 A

Vitamin B_1 (see Thiamine hydrochloride).
B_2, (see Riboflavin).
B, complex, natural (see Rice bran concentrate and Yeast).
B_{12}, crystalline, 1-gram or 5-gram vials gram 245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram 185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver. Calciferol and Viosterol).
D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
less than kilo lots kilo 45.00 - —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin).
K, Active (see Menadione).
K_1, 25 gram bots gram 4.50 - —
Violet methyl toner (see Blue methylviolet toner).
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls lb 2.25 - —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb 1.95 - —
25-49-lb. lots, N. Y. or Chicago lb 2.05 - —
5-24-lb. lots, cns., N. Y. or Chicago lb 2.15 - —
Wattle bark, fair average, African, bales, ex dock ton 99.00 - —
merchantable, bales, ex dock ton 96.00 - —
extract, liq., 35% tannin, bbls lb .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb .09¾- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb .10 - —
Wax, amorph. (see Wax microcrystalline)
Bayberry, bgs lb .43 - .45
Bees, crude, African, bgs lb .64 - .65
Brazilian, bgs lb .66 - .67
Central American, bgs lb .63 Nom.
Chilean, bgs lb .66 - .67
refd., USP, bleached, white bricks, 100 lb. ctns lb .74 - .77
slabs, 100 lb. ctns lb .73 - .76
yellow, bricks, 100 lb. ctns lb .66 - .68
slabs, 100 lb. ctns lb .65 - .67
Candelilla, crude, bgs lb .47 - .48
refd., bgs. lb .50 - .51
Powdered candelilla, 20 mesh, 7c. per lb. higher. 80 mesh, 7c.; 100-200 mesh, 8c.
Carnauba, chalky, bgs., ton lots, lb .55 Nom.
North country No. 2, bgs., ton lots lb .63 Nom.
pure refd., bgs., ton lots, lb .71 - .73
No. 3, Ceara, crude, bgs., ton lots lb .55 - .57
refd., pure, bgs., ton lots lb .65 - .66
tech., bgs., ton lots lb .62 - .63
Parnahyba, crude, bgs., ton lots lb .58 - .60
refd. pure, bgs., ton lots lb .66 - .67
yellow No. 1, Ceara, bgs., ton lots lb 1.03 - 1.03
Parnahyba, bgs., ton lots, lb 1.06 - 1.08
Powdered carnauba wax price differentials same as powdered candelilla.
Japan, bgs lb .42 - .44
Microcrystalline, 170-175°F., m.p., ASTM, penetration 15-20 ctns., 20,000 lbs., group 3, works lb .13 - .14
smaller lots, same basis, lb .14 - .15
black, ctns., 20,000 lbs., same basis lb .11½- .12½
smaller lots, same basis, lb .12½- .13½
white, ctns., 20,000 lbs., same basis lb .24 - .25
smaller lots, group 3, works lb .25 - .26
180°-185°F. m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis, lb .16 - —
smaller lots, same basis, lb .17 - —
black, ctns., 20,000 lbs., same basis lb .14½- —
smaller lots, same basis, lb .15½- —
white, ctns., 20,000 lbs., same basis lb .27 - —
smaller lots, same basis, lb .28 - —
190°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb .20 - —
smaller lots, same basis lb .20½- —
black, ctns., 20,000 lbs., same basis lb .18 - —
smaller lots, same basis, lb .18½- —
white, ctns., 20,000 lbs., same basis lb .33½- —
smaller lots, same basis, lb .34½- —
Montan, dom., refd., bgs lb .27 Nom.
imp., crude, Bohemian, bgs lb No prices.
German, bgs. lb No prices.
Ouricury, refd., pure, bgs lb .86 - .88
tech., bgs lb .80 - .82
Paraffin (see P).
Spermaceti, blocks, cs. lb .30 - .33
cakes cs. lb .31 - .34
Sugar cane, dom., refd., slabs, works lb .65 - .75
spot lb .67¼- .72¼
White lead (see Lead, white).
White pine bark, rossed, bls lb .18 - .19
White precipitate, USP, powd., dms. lb 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb .18 - .19
rossed, bls lb .19 - .21
Witch hazel bark, bls lb .16 - .17
leaves, bls. lb .20 - .21
Wollastonite, fine, bgs., c.l., works, ton 39.50 - —
l.c.l., ex whse ton 56.00 - —
medium, bgs., c.l., works ton 27.00 - —
l.c.l., ex whse ton 44.00 - —
Woolfat, crude (see Degras), USP (see Lanolin).
Wormseed, American, bgs lb .20 - .25
Levant, bgs lb 4.25 - 4.50

X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., t.c.l., works lb .40 - —
58°-58°C., dms., t.c.l., works, frt. equald lb .30 - —
45°-47°C., dms., c.l., same basis, lb .212 - —
t.c.l., same basis lb .215 - —
tanks, same basis lb .199 - —
fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis gal .99 - —
t.c.l., same basis gal .99 - —
tanks, same basis gal .95 - —
dry at or below 227°C., dms., c.l., same basis gal 1.11 - —
l.c.l., same basis gal 1.14 - —
tanks, same basis gal 1.00 - —
Xylidines, mixed, dms., c.l., truckload, works lb .39 - —
l.c.l., same basis lb .40 - —
tanks, same basis lb .38 - —
Xylol, coaltar, indust., tanks, works:—
Bethlehem, Pa gal .34 - —
Birmingham district gal .32 - —
Chicago district gal .35 - —
Cleveland district gal .34½- —
Geneva, Utah gal .27 - —
Johnstown, Pa. gal .33 - —
Lackawanna, N. Y. gal .35 - —
Lone Star, Tex. gal .33 - —
Lorain, Ohio gal .33 - —
Middletown, Ohio gal .34 - —
Minnequa, Colo gal .34 - —
Philadelphia district gal .34 - —
Pittsburgh district gal .32 - —
Sparrows Point, Md. gal .34 - —
Terre Haute, Ind gal .35 - —
Youngstown, O gal .32½- —
petroleum, indust., tanks, works:—
Bayonne, N. J. gal .34 - —
Baytown, Tex. gal .33 - —
Chicago, Ill. gal .35 - —
Philadelphia, Pa. gal .34 - —
Providence, R. I. gal .35 - —
Wood River, Ill. gal .35 - —

Y

Yara yara, cns lb 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb .47 - —
90 Int'l B units per gram, 100-lb. dms lb .53 - —
200 Int'l B units per gram, 100-lb. dms lb .56 - —
300 Int'l B units per gram, 100-lb dms lb .60 - —
Yellow, barium chromate, CP, bbls., dlvd., N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb .33 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.
Benzidine AAA, bbls., dlvd. lb 2.00 - —
AAOT, bbls., dlvd. lb 2.25 - —
Lightfast, bbls., dlvd. lb 3.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb 2.85 - —
Lithopone, all shades, bbls., frt. alld., E. of Rockies lb 1.15 - —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.
Chrome, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb .32 - —
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa 10 G, bbls., same basis as yellow, chrome lb 2.15 - —
G pigment, bbls lb 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb .05¼- —
Peruvian type, bgs., t.c.l lb .038 - —
pure, bgs., c.l., works lb .11½- —
l.c.l., works lb .11¾- —

Yellow, mercury oxide, bbls., 1,000-lb. lots lb 5.58 - —
smaller lots lb 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd. lb .26 - —
basic, dlvd. lb .31 - —
Yerba santa leaves, bls lb 40 .42
Yohimbine hydrochloride, bots, tin. oz 4 50 - —

Z

Zein, bgs., 36,000-lb. lots or more lb .38 - —
1,000 to 36,000-lb. lots, works lb .40 - —
smaller lots, works lb .43 - —
Zinc acetate, NF VIII, dms. lb .53 - —
tech., dms., works lb .27 - —
Borate, bgs., c.l., dlvd. E lb .192 - —
t.c.l. dlvd E lb 202 - —
Chloride, NF, gran., dms. lb .42 - —
precipitated powd. dms lb 26 - —
soln., 50%, dms., c.l., works, 100 lbs 5.50 - —
t.c.l., works 100 lbs 6.10 - —
tanks, works 100 lbs 4.85 - —
tech., fused, dms., c.l., works, 100 lbs. 10.10 - —
l.c.l., works 100 lbs. 10.60 - —
gran., fib., dms., c.l., works, 100 lbs. 10.85 - —
l.c.l., works 100 lbs. 11.35 - —
Chromate (see Yellow, zinc).
Cyanide, kgs., 1,000-lb. lots or more, works lb .523 —
smaller lots, works lb .543 —

—Continued on page 61

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Bad Government Business

The most imperative need in the big job of getting government out of business in which it has no place is not connected with any particular competition with private enterprise, although the business in question has some such aspects. That need is to get government out of its costly functioning as "angel" for agriculture.

The farm price situation, which is almost, if not quite, the biggest problem facing national political groups today, is only a symptom of the malady deriving from that functioning. The basic trouble is the farm policy, which has had a psychical-physical effect upon the farmers of this country, resulting in the inability—psychical or physical—of a large number of them to stand on their own feet.

The need for getting government out of the business of furnishing financial crutches for such farmers is most emphatically emphasized by the fact that that business showed a loss of $799,061,464 for the year ended June 30, last. That loss, of course, must be made up by those who pay federal taxes. That lays a burden on both shoulders of business: it must pay heavily in taxes, and must lose heavily in sales because of the drain of individual taxes on the buying power of consumers.

Some farmers and a larger number of the political out's who started the costly "angeling" are hollering loud and wide that the farmers are not sharing equitably in the big prosperity of the country. They are blaming it on the political in's—a quite logical consequence of the latters' equally vociferous claiming of all the credit for that prosperity. So, it is quite natural that plans to put congress on a farm-price diet as soon as it convenes are getting big and hot.

It is hard to figure out just what is the agricultural aspect of the national prosperity. Data are quite confusing. Recently published figures, attributed to the Department of Commerce give the agricultural income (personal) for 1954 as $15,100,000,000; other figures, attributed to the Federal Reserve Board, give the realized net income of farm operators in 1954 as $12,000,000,000. The reserve board figures are more than 2.7 times those given for 1940. Other figures, attributed to the board show that farmers' liquid financial assets at the beginning of 1955 were $19,000,000,000—more than 4.6 times what they were in 1940.

It is not easy to see how business—that comprising all other industries—can do anything to make a business out of the agricultural industry. Certainly that essential transformation will not be effected by way of political propping. The first step toward its effectuation must be the instilling in agriculture of a determination to be self-confident and self-helpful, along with recognition of the fact that prosperity is the reward of work, and of that inadequately accepted economic truth that outgo, not output, is the producer of prosperity. After that would come the developing of a new—really a return to a very old—method of marketing farm products. The stretch between producer and consumer is far too wide and too costly. It can be reduced in both aspects by expanding cooperative processing and marketing. It is difficult to delineate anything other than advisory that national business organizations might do in that direction in conjunction with the national organizations of agriculture. It is not difficult, however, to see that something should be done—must be done—to get out from under that annual burden of almost $800,000,000.

Abundant Material Badly Needed

In all the limitless talk about international rivalry in magnitude and speed of scientific and technical endeavors, there is very little about the criterion for their evaluation that is best related to the welfare of mankind. That criterion is not how much is being done or how fast or how far is the progress of its doing. It is what is being done and where it is going. So, it is not to be wondered at that the world's most inadequately met need for a chemical compound is for the one that is most plentiful on the surface of the earth. That compound is the simple oxide of hydrogen commonly known as water.

The world's need for that compound is almost wholly as a physical material. The meeting of that need is almost wholly a physical operation. Because of the widely manifested development of physical theories and practices throughout the world, the fact that a great need for water exists throughout the world is more than slightly puzzling. The reason, of course, is that man has been too long and too much content to leave the supplying of that need to nature. He has helped more than a little, at least in the stocking and distributing of the supply; but he now is faced with a big demand that he do something more than a little on the production side.

It is not necessary that he agree in full with the former chairman of the Atomic Energy Commission that "the nation is emphasizing its atomic power program in the face of a much more urgent problem—a growing water shortage." It is no more necessary that he agree with the critics of that position, who say that atomic power offers the best promise of adequate electrical energy for the conversion of seawater into a more nearly pure oxide of hydrogen suitable to the needs of arid regions. Other sources of electrical energy can be utilized, perhaps at less cost. There also is more than a little promise in the direction of the slowly, but steadily developing utilization of solar energy, which is abundantly available in most arid regions.

The practicable desalting of seawater is under study by agencies of the United States government. It is also getting much study in an OEEC project, mainly in the Netherlands. Those studies encompass evaporation, distillation, electrolysis, and freezing. Private developments also are making much progress. One has gone so far as successfully to apply ferric chloride in the prevention of scaling—a big problem in processes involving heat or electricity.

The newer advances in scientific-technologic developments which have to do with the utilization of the sea as a region of food production under new "agricultural" processes have some concommitant promises of restoring eroded minerals to the world's arable soils. Their potentialities are said also to encompass the production of saltless water. It is greatly to be desired and promoted that the desalting of seawater get more attention, especially politically, than is now being given to projects which would inundate valuable, necessary productive acreage in the construction of reservoirs for water, not as a source of energy.

Near-West Needs Study

There is an important and imperative lesson for all groups in the population of the United States somewhere in the matter of the position taken by the delegates of a number of Latin-American nations in the recent action of the General Assembly of the United Nations on the Algerian question. Why did those delegates vote contrary to those of the United States, Great Britain, and France and in violation of the provisions of the UN charter?

The answer to that question is not easy to find in completeness. The Soviet invasion of Latin America has proceeded farther commercially and socially than is recognized in this country. But, there has been but little evidence that it is exerting an influence politically. That is, of course, in reference to domestic policies. It must be assumed from the Algerian action that there has been some influence on certain international aspects.

Anyhow, it is time that the United States, its people as well as its government, took more of an appropriate interest in its fellow-hemisphereans to the South. The attention needed there is well portrayed in the rushing of medicines, food, and other necessities to the hurricane-flooded regions of Mexico. It is not of the kind that had a part in the deal which did much to put an end to the dictatorship in Argentina. It is well exemplified in the program set up at the recent meeting of the directing council of the Pan-American Sanitary Organization. As that group is also a regional committee of the World Health Organization, its membership includes France, the Netherlands, and the United Kingdom because of their territories in the Western hemisphere. In that role, it should have great potentialities toward better international relationships in the United Nations—if it be properly inspired, persuaded, and assisted.

That is where the United States has a place, especially by way of its drug and sanitary agents industrial and commercial groups in what should be their relations with the Pan-American Sanitary Bureau. The program laid out by the council for the bureau should be studied from every angle by those United States groups. They will find therein much guidance toward the doing of much good for many who need it. That, of course, will be public relations which will pay because it gets down to fundamental human relations.

President Eisenhower recently urged the people of this country to get to know the peoples of other countries as a means of attaining better world relations. It can be that the President speaks from experience; because, if in his World War II chief-commandership he had known various peoples better, the West-East conflict over Germany could have been, at least in large part, avoided. Dealing with people in matters of health is as any local druggist can say, the best way to get to know them.

Washington Talks It Over

By Ralph L. Cherry
Chief, OPD Washington Bureau

Close observers of the government's industry expansion programs might have noticed some discrepancy last week in the figures used in the official announcement relative to the increase in the synthetic glycerine goal, and the increase mentioned in the official document filed with the Federal Register. The official announcement said the increase was 57,000,000 pounds. The official document said it was 70,000,000 pounds.

The confusion stems from the fact that one of the prospective producers of synthetic glycerine has dropped out of the picture, which has added about 13,000,000 pounds to the amount against which the Office of Defense Mobilization will issue tax amortization certificates. The agency's publicity expert chose to ignore this fact in writing up the release.

Whether the 70,000,000 tons opened up in the synthetic glycerine goal will be taken up by industry by the June 30, 1956, deadline is open to much speculation. No one in the government is overly optimistic that this will take place, but neither are they pessimistic about it. They have heard of two probable industry expansions which would take up about 60 percent of the 70,000,000-ton increase. One is a substantial producer of glycerine who is considering a rather large expansion, and another is toying with the idea of producing "fermentation" glycerine in view of the currently favorable molasses situation.

Lobbying Still Big Business

Even when congressional sessions are relatively placid and there are no major issues to stir up the country very much as was the case last session, lobbying in Washington continues to be big business. Records showed that more than 1,000 individuals, firms, associations and corporations registered for lobbying actvitities at some time during the session.

Most of those registered spent less than $1,000 in pursuit of their objective, but others listed expenditures up into the thousands of dollars. There appears to be a direct relationship between the amounts spent and the legislation under consideration. As for example, the General Gas Committee reported expenditures of $40,586. Natural gas legislation was a very live subject during the session. United States Cuban Sugar Council spent $39,855. Some vital changes in the sugar quota law were up for consideration last session. The steam generated behind the postal pay also was indicated by the expenditure of $32,392 for lobbying by the National Federation of Post Office Clerks.

Narcotic Drug Law Changes

Distributors of narcotic drugs who make it a practice to keep their customers informed of changes in government controls should not overlook the fact that a change in federal controls does not always mean a change in practice or procedures. The laws of the state also must be considered. For example:—

Recently, the federal narcotic law and regulations were amended to permit nine categories of narcotic drugs possessing relatively little or no addiction liability to be filled by oral prescription. As pointed out by the Bureau of Narcotics, as far as the federal government is concerned, the oral prescription procedure is now applicable, but it should be understood that the federal law and regulations convey no authority to fill an oral prescription in violation of a state or territorial narcotic law.

It is understood that in a number of states, some type of amendment to the state narcotic law has been enacted with a view towards allowing the oral prescription procedure in conformity with the federal law and regulations. Practitioners and druggists seeking information as to the status of oral prescription procedure under the narcotic law of a given state or territory should apply to the appropriate agency for such information.

More US Business to Small Firms

General Services Administration is stepping up its efforts to award more government business to small firms. Under an agreement just reached with the Small Business Administration, GSA is setting aside $319,475 in upcoming orders exclusively for small business—firms defined as concerns with less than 500 employees.

The purchases by GSA are to be for the navy, and include memorandum pads, record books and duplicating paper. Invitations to bid on the first part of the purchasing program already have been issued and the others will follow shortly. GSA's New York office is handling the buying.

GSA describes the agreement as the first of what "we hope will be a continuing effort to channel a fair percentage of our contrast awards to smaller business firms."

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Heavy Chemicals

Increases recorded October 1 sent the heavy chemicals price trend index above 100 for the first time since its inception on July 1, 1952. Scoring the most notable gains among the chemicals was a large group of closely-related alkalies, as well as some of the phosphates.

United States production of industrially important inorganic chemicals was generally lower in July than in June, but was higher than June, 1954, levels, according to the Bureau of Census. For the month of July, a new record monthly production of calcium carbide was noted. End of month inventories at producing plants were generally higher than for June 30.

While some alkali producers reported that they had not as yet noted any slackening in demand due to newly inaugurated increases, others indicated that sales had slumped to some extent during the week, as customers lost interest following the rush to get in material prior to the October 1 deadline on contract prices.

The end of the phosphate strike at the plant of the last strikebound producer in Florida was expected to again bring all the phosphates into normal supply. Commercial anhydrous aluminum chloride was advanced effective today on spot by one producer.

No. 2 copper scrap declined sharply early in the week, with better availability and an easier London market. However, primary copper remained short, and prices were firmly held. Silver for the second time this year shot up to its highest levels in thirty-five years.

The American Paper and Pulp Association reported production for the week ended October 1 at 100.2 percent of theoretical capacity, as compared with the revised figure of 98.5 percent for the previous week and 94.8 percent for the corresponding week of last year.

Acid, Chromic—Prices remained unchanged. Consuming demand held up well, and deliveries against contract commitments moved in good volume. Supplies were adequate for current needs.

Acid, Hydrochloric — Buying interest was strong and active, particularly in the east and midwest, as a number of consuming industries called for large volume shipments. However, continued heavy chlorination of organics accounted for an oversupply of byproduct muriatic in many areas, and producers were faced with persistant storage problems.

Acid, Nitric—Preliminary figures for July production compiled by the Bureau of Census show output for that month at 173,595 tons, a decline of 5 percent from the 178,428 tons produced in June.

Acid, Phosphoric—Prices newly established October 1 for 75 percent, 80 percent and NF 85 percent acid were uniform in the industry during the week, and a fair amount of business was reported being booked at those prices. Supplies were ample for current requirements.

Acid, Sulfuric—Demand remained very active, and large quantities moved to a number of outlets, including rayon, steel, synthetic detergents, and alkylation. It was pointed out that although general refinery activity was below previous levels, the current high octane race was a large factor in increased alkylate activity, as producers of motor fuel turned higher fractions into the fuel.

Steel production last week was estimated at 2,330,000 tons, or 96.5 percent of capacity by the American Iron & Steel Institute. Actual output the previous week totaled 2,341,000 tons, not far from the record weekly output of 2,345,000 tons posted for the week of May 9, 1955. Actual output one year ago was 1,692,000 tons.

Aluminum Chloride—Production of anhydrous aluminum chloride in July rose to 2,857 tons, over June output of 2,717 tons, and July, 1954, output of 2,766 tons, according to the Bureau of Census. Output of liquid and crystal (32 degree Be) declined to 1,186 tons in July from 1,296 tons in June, but was considerably higher than the 746 tons produced in July, 1954.

Commercial anhydrous aluminum chloride was increased today on spot by one producer to 15½c. per pound, drums, carlots, f.o.b. works, with less carlots or less truckload quantities ½c. higher. The increases go into effect on contract January 1, 1956.

Aluminum Sulfate — Price schedules were maintained without change. Buying interest for use in water purification in the Carolinas, New England, Pennsylvania and other flood and hurricane-stricken areas in the east was said to have been strong over the past few weeks.

The paper and pulp industry continued to require large quantities of sulfate, as high production rates were steadily maintained. Supplies were adequate for current needs.

Ammonium Phosphates — Monoammonium and diammonium phosphates were offered at uniformly higher prices following advances October 1.

Calcium Chloride — Demand continued active. Spot and contract prices, higher the previous week, were said to have had little deterrent effect thus far on buying interest. Supplies were about adequate for current needs.

Calcium Phosphates—Higher prices for dibasic USP, monobasic and tribasic phosphates were in effect following spot and contract advances on October 1.

Chlorine—Contract prices were higher on October 1. Supplies were reported on the snug side, and it was said that although some new contract business could currently be taken on, producers would have trouble in filling a large spot order, or keeping up with any sharp increase in contract demand.

Effective October 1, tankcar quantities rose to $3.05 per hundred pounds, f.o.b. works, freight equalized. Five-car lots in multi-unit cars were offered at $3.92 per hundred pounds; three cars, $4.12; two cars, $5.12 and one car, $7.12 per hundred pounds, same basis.

Copper Sulfate — Inventories continued extremely short, even at the higher prices. Industrial demand for sulfate was well maintained.

Potash, Caustic—Buying interest for liquid held up well, as soapers continued fairly active in the market. Solid grades were not moving as well as previously, and producers felt that demand was in line with seasonal trends. Prices held firm and unchanged, and no changes were expected during the remainder of the fourth quarter.

Potassium Carbonate — Glass industry inquiry was slightly lower than previously, but holding up to expectations. Quotations were slated to hold for the rest of the year. Supplies were ample for current needs.

Soda Ash—Price schedules, advanced 10c. per hundred pounds across the board October 1, were expected to hold without change through the remainder of the quarter. Trade sources had expected demand to taper off during the first week in October, following the contract buying rush to get in material before the first of the month. However, it was indicated that interest had held up surprisingly well over the week for a number of end uses.

Buying in quantity by the glass industry was off to some degree, and this situation was attributed to a decrease in demand for soft drink and beer bottles following the summer season. However, holiday demand for liquor bottles was expected to give impetus to consumption of ash by the glass industry early in November.

Soda, Sal—A source announced that it

For Late Market Developments, See Page 4

Price Trends

Advanced

Acid, phosphoric, food grade, 75%, 25c. per 100 lbs.
80%, 31c. per 100 lbs.
NF, 85%, 25c. per 100 lbs.
Ammonium phosphate, coml., 35c. per 100 lbs.
dibasic, 35c. per 100 lbs.
Calcium phosphate, dibasic, USP, 50c. per 100 lbs.
monobasic, 50c. per 100 lbs.
tribasic, 65c. per 100 lbs.
Chlorine, liq., tanks, 12c. per 100 lbs.
Mercury, $8 per flk.
Salt, rock, 2c. per 100 lbs.
table, 2c. per 100 lbs.
Silver, 1⅛c. per oz.
Soda ash, 10c. per 100 lbs.
Soda, caustic, liq., 10c. per 100 lbs.
flake, solid, 25c. per 100 lbs.
Sal, 15c. per 100 lbs.
Sodium bicarbonate, USP, 10c. per 100 lbs.
powd., 10c. per 100 lbs.
Carbonate, monohydrated, 10c. per 100 lbs.
Chlorate, ¼c. per lb.
Phosphate, monobasic, duohydrate, 15c. per 100 lbs.
Pyrophosphate, acid, 50c. per 100 lbs.
ferric, $3.50 per 100 lbs.
Sesquicarbonate, 15c. per 100 lbs.

Reduced

Potassium stannate, 0.4c. per lb.
Sodium stannate, 0.5c. per lb.
Stannic chloride, 0.6c. per lb.
Stannous chloride, anhyd., 0.6c. per lb.
hydrous, cryst., ⅜c. per lb.
Sulfate, 0.6c. per lb.
Tin, ⅞c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
100.09	99.83	99.23	98.54

(*For Current Prices see Page 9*)

is now marketing a concentrated sal soda, superior to the old material in that it is more stable and less likely to be affected by weather changes and dampness. The material is also said to be more economical to use. Concentrated sal soda was currently being offered at $2.30 per hundred pounds, bags, 5,000 pounds lots, f.o.b. works and $2.60 per hundred pounds, smaller lots, same basis.

At the same time, the company announced that it was going to discontinue production of old type sal soda some time in the near future, in order to devote facilities to full time output of the new product.

Soda, Caustic—Prices were 10c. per hundred pounds higher for liquid and 25c. per hundred in solid and flake, effective October 1. Demand was said to have continued strong during the week, and did not appear to have been dampened by the increases. The rayon industry continued to figure heavily in sales, as demand from that source continued strong, in keeping with high rayon staple and high tenacity cord output.

The Bureau of Census reports that stocks of electrolytic liquid July 31 totaled 166,098 tons, as against 151,412 tons June 30. Stocks of dry caustic July 31 totaled 26,741 tons, as against 26,254 tons on hand June 30. Lime-soda liquid on hand July 31 totaled 10,807 tons, as against 7,280 tons in stock June 30. Lime-soda process dry caustic in inventory July 31 rose to 5,192 tons from 4,789 tons on hand at the end of June.

Sodium Bicarbonate—Demand was said to have held up well during the week, despite the initiation of higher price schedules on October 1.

Sodium Chlorate—Prices were steady following fractional advances October 1. According to the Bureau of Census, output of sodium chlorate (100 percent $NaClO_3$) in July declined to 3,477 tons from 3,864 tons in June, but topped output of 2,593 tons in July, 1954. Stocks in producers' hands July 31 declined to 2,972 tons from the 2,997 tons in June.

Sodium Phosphates—Prices were uniform at higher levels established October 1 for acid pyro, ferric pyro, and monobasic duohydrate. Output of monobasic sodium phosphates in July declined to 458 tons from 673 tons produced in June, and was lower than the 595 tons produced in July, 1954. Stocks in July declined to 462 tons from the June 30 level of 538 tons.

Output of acid pyrophosphate in July declined sharply to 845 tons from the 1,658 tons produced in June, and was lower than the 1,206 tons produced in July, 1954. Inventories at the end of July declined to 1,224 tons from 1,652 tons on hand at the end of June.

Production of sodium tripolyphosphate in July declined to 35,254 tons from 41,438 tons in June, and was below output of 35,986 tons in July, 1954. Stocks at the end of July rose to 9,920 tons from the 9,376 tons on hand at the end of June.

Sodium Silicates—While two producers boosted prices October 1, others stood pat with old prices, which were expected to last through the fourth quarter, owing to contract commitments. Other silicates were steady and unchanged, but producers indicated that current price schedules were under study, and past increases in labor and raw material costs were being considered in view of possible changes January 1.

Soluble silicate output in July declined to 40,905 tons from the 56,923 tons produced in June, but was higher than the 39,073 tons produced in July, 1954, according to the Bureau of Census. Stocks in producers hands July 31 amounted to 67,025 tons, as against 70,834 tons in stock June 30.

Sodium Sulfate—Stocks of crude saltcake scored another sharp increase during the month of July, and at the end of the month amounted to 64,504 tons, against 56,512 tons in June. Saltcake producers pointed out that there was little concern in the trade over the current buildup in supply, largely because paper output normally slows down due to shutdowns in July and August.

Demand was also reported running strong, and this position was borne out by an average of over 100 percent of theoretical capacity operations in paperboard and about 95 percent of capacity operation for paper mills during the last several weeks. It was generally felt that imports had been the primary cause in the domestic buildup in stocks, but that in the near future, when imports fell off, there would be a drain on the domestic reserve.

Inventories in the hands of producers were said to be long, but not uncomfortable. Anticipated growth in kraft paper production during the near future was expected to make even greater demands on the available saltcake supply than previously. It was noted that although some raw material costs had risen, saltcake prices were likely to stay the same for the remainder of the quarter.

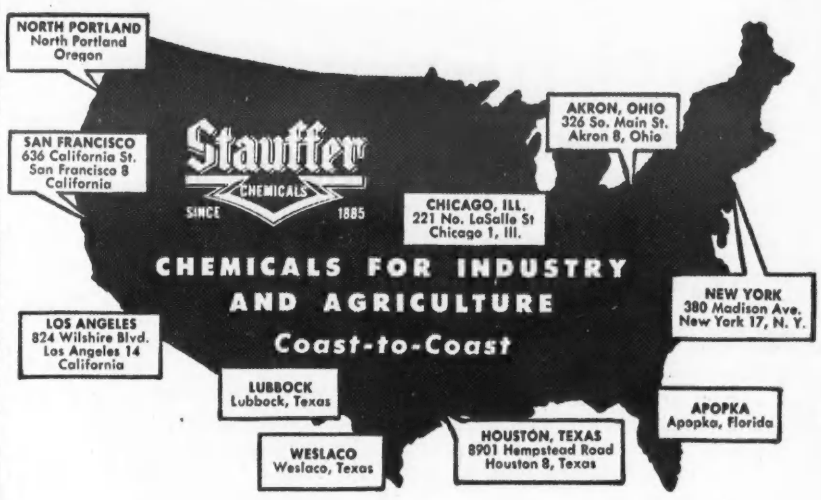
Sulfur—The following figures, in long tons, report production, mine or paint shipments, apparent sales, and producers' stocks of native and recovered elemental sulfur of a purity of 97 percent or greater in the United States, as compiled by the Bureau of Mines.

	June 1955	July 1955	July 1954
Native sulfur (Frasch) production	425,050	487,633	471,594
Mine or plant shipments	528,041	483,857	408,872
Apparent sales	*474,545	*476,447	*415,287
Producers stocks	†2,875,387	†2,886,573	†3,258,821
Recovered sulfur production	32,500	33,900	31,900
Mine or plant shipments	33,190	36,870	39,506
Apparent sales	*33,190	*36,870	*44,506
Producers stocks	†123,266	†120,296	†113,969

* Calculated from production and changes in stocks during the period.

† Producers stocks at mines or plants, in transit, and in warehouse at end of period.

Tin Salts—With lower tin, potassium stannate was quoted at 68.9c. to 75.5c.; sodium stannate, 55.7c. to 61.1c.; stannic chloride, 77.1c. to 78.1c.; anhydrous stannous chloride, 83c. to $1.049; hydrous crystals, 78½c. to 79½c., and sulfate,



CHEMICALS OUTLOOK

October, 1955

WYANDOTTE CHEMICALS

This news bulletin about Wyandotte Chemicals services, products, and their applications, is published to help keep you posted. Perhaps you will want to route these and subsequent facts to interested members of your organization. Additional information and trial quantities of Wyandotte products are available upon request . . . may we serve you?

SAVE WITH WYANDOTTE'S ANHYDROUS CALCIUM CHLORIDE PELLETS

Calcium chloride in pellet form is now available from Wyandotte in unlimited quantities. Pellets are anhydrous . . . they contain 94-97% $CaCl_2$ compared with the 77-80% $CaCl_2$ content of regular flake. Consequently, only four 100-lb. bags of pellets are required to accomplish the same result as five bags of regular flake.

Pellets can be shipped in 100-lb. waterproof bags, or dry in bulk -- in hopper cars or tank cars. When shipped dry in tank cars, they can be unloaded by merely pumping in water and pumping out concentrated calcium chloride solution. When shipped dry in hopper cars, they can be unloaded from the bottom and mechanically conveyed to tank trucks and storage facilities. Stored in bulk -- in convenient silos -- pellets maintain their normal free-flowing characteristics.

Wyandotte pellets can be used wherever flake calcium chloride is used . . . and at a saving in most areas. They can also be rapidly dissolved in any type of container. In most applications, pellets may be used with standard equipment.

Here are some of the many advantages you can gain through pellets: 20% less product does the same job as flake; pellets can be shipped in bulk -- which eliminates bagging costs, and bag-opening costs . . . lowers storage charges . . . saves time and labor in handling . . . and effects substantial transportation savings.

Wyandotte Calcium Chloride is available in pellet, powdered, flake, and liquid forms, and in various sizes of lump (94-97% $CaCl_2$) or broken solids (73-75% $CaCl_2$). For prices, technical data, handling and storage information -- or bids on your requirements -- address your inquiries to Department CO for prompt attention.

A NEW ALKANOLAMINE

Monolene,* a new organic product -- N-(2-hydroxypropyl) ethylenediamine -- is now available in pilot-plant quantities. This new "water white" liquid will be of interest to those concerned with reactions involving primary and secondary amine groups, as well as secondary hydroxyl groups. Monolene may be used in the production of cationic surface-active agents and resin intermediates. Other possible applications are: in the production of dyestuffs, textile-finishing compounds, insecticides, oil additives, etc. Write for data and a laboratory sample.

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3. Coarse grind—unscreened (1 mesh and finer, 25-30% through 20 mesh).
4. Coarse screened (same as coarse grind, screened to remove 20 mesh and finer).

This material is a grayish crystalline solid with maximum iron content of 0.05%. "Extra fine" and "fine" grinds contain 97.5% $AlCl_3$. "Coarse grind" and "coarse screened" contain 98.5% $AlCl_3$.

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Nonferrous Metals

Chromium — Consumption of chromite during July dropped 11 percent compared with June, according to the Bureau of Mines. Chrome ore consumed for metallurgical use (in the manufacture of ferrochromium, chromium metal, and other chromium alloys) decreased 2 percent, and refractory use (to make refractory bricks, cements, ramming mixtures and plastic mixes) dropped 32 percent; chemical use (in the production of chromic acid, and chrome oxide green) was approximately the same as in the previous month.

Producers of chromium alloys use all types of chromite, including chemical and refractory grades; metallurgical grade chromite (everything not refractory or chemical) consumed in June comprised 79 percent of the total used by these producers; chemical grade 11 percent, and refractory grade 10 percent. Of the metallurgical grade consumed, 70 percent had a Cr/Fe ratio of at least 3:1, 19 percent had less than 3:1 but at least 2:1 Cr/Fe ratio, and 11 percent had less than 2:1 Cr/Fe ratio.

Production of metallurgical products (chromium alloys) increased 5 percent over June and totaled 34,190 short tons. Stocks on hand by producers on July 31, totaled 46,382 short tons. Production of chromium chemicals during July totaled 9,644 short tons in terms of sodium bichromate equivalent.

Domestic chromite produced (shipments) in July totaled 13,261 short tons, natural weight. Alaska made the first shipment of the year during July, shipping approximately 1,288 short tons on a dry weight basis. On a dry weight basis, California shipped 2,444 tons, Montana 8,740 tons, and Oregon 116 tons.

Copper — Metal continued unchanged, at 43c. per pound, delivered US destinations. However, a decidedly weaker tone was noted in the No. 2 scrap market last week, with increasing supplies and a lower London market. At one time, scrap reached 39c. per pound, spot.

Mercury—The market was firmer during the week, as metal was scarce. Small lot quotations ranged from $278 to $280 per flask, spot.

Magnesium—Net shipments of magnesium mill products during August amounted to 1,742,000 pounds, according to the Bureau of the Census. This total was 21 percent above July shipments of 1,437,000 pounds. No allowance has been made for usual seasonal changes or number of working days in compiling this total or in computing changes from previous periods.

Silver—Bullion reached its highest levels in thirty-five years early in the week, and was quoted at 91⅞c. per ounce, spot.

Tin—The market fluctuated narrowly, ending at 96⅛c. per pound, spot, for Straits metal.

A trade source reported that scientists have found tin to be the most efficient corrosion-resisting alloying element for zirconium in water-cooled nuclear reactors. An alloy is said to have been made containing 1.5 percent tin, 0.12 percent iron, 0.10 percent chromium and 0.05 percent nickel. It was reported to be so corrosion-resistant that the amount of corrosion in a year measures in ten-thousandths of an inch.

In July Malaya mined 5,245 long tons of tin-in-concentrates, as against 5,084 long tons in June, and 5,040 tons in July, 1954, according to the Malayan Tin Bureau. The July total represented the largest monthly total this year, primarily due to richer ground worked by dredges in the Perak area.

Exports of straits tin from Malaya in July totaled 7,112 long tons, as against 5,913 long tons in June and 6,683 long tons in July, 1954. July exports to the United States totaled 4,727 long tons. The January-July total, 42,252 long tons, was the largest since 1950.

The Texas City smelter produced 950 long tons of pig tin in July (June, 851; July, 1954, none). The Federal Facilities Corporation announced August 8 that it had contracted with Bolivia for 2,500 long tons of tin-in-concentrates for the three months ending October 31; with Indonesia, for 1,600 long tons up to October 20; and with the Belgian Congo for 500 long tons up to October 31. The FFC estimated its purchases over the next 12 months at between 20,000 and 22,000 long tons. On August 31 the Office of Defense Mobilization authorized the FFC to enter into negotiations for the disposal of the Texas City smelter, on which the U. S. Government has spent about $13,200,000 for construction, additions and improvements to date.

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Free Trade Requirements Stated by duPont Official

Free trade between nations can exist only when participants share mutual standards in living conditions, governmental responsibility, and business practice, Crawford H. Greenewalt, president of E. I. duPont de Nemours & Co., Wilmington, Del., said last week before the national meeting of the Canadian Chamber of Commerce.

Instances favoring elimination of trade barriers on this basis are "few and far between," Mr. Greenewalt declared. Imports which represent depressed wage structures, he added, can cost heavily in displacement of industrial skills and technologies.

Only under such conditions as are common to the United States and Canada could free trade approach reality, Mr. Greenewalt said. He proposed that both nations "look toward the day" when tariff walls between the two might be leveled. Such an "adventure in international amity," said the speaker, who is a director of duPont Company of Canada, Ltd., as well as head of the American chemical firm, would emphasize both the "conditions" and the "atmosphere" necessary to free-trade relationships.

"If trade is to be truly free on a world-wide basis—surely a laudable objective—certain conditions would appear to be essential," he said. "We must assume first a stage of grace in which mankind will no longer be harassed by war. We must assume second that nations entering into trade on a free basis have more or less equal wage and price structures; otherwise reciprocal advantages would be hard to establish. We must assume finally mutual responsibility of government, so that agreements will be honorably executed and guaranteed. We must assume a devotion to principle so that trade can be conducted in an environment of trust and confidence.

Atlantic Chemical Offers New Range of Azoic Dyes

"Atlantic Neutrazoics," a new range of stabilized azoic dyestuffs which are said to eliminate the need for acid aging when printing rayon and cotton, have been announced by Atlantic Chemical Corporation, Passaic, N. J. The new "Neutrazoic" colors are naphthol-salt combinations which are stabilized through the use of new compounds, and which develop in neutral steam.

The range is reported to be extremely flexible and may be printed alonside pigment, vat and soluble vat colors without changing formulations, and furnishing the same deep shades and strength as ordinary stabilized azoic colors. Formulations for printing are said to require no more time or effort than is customary with ordinary stabilized azoics. The range is fast to boiling, washing, chlorine and light. Other features include extremely low print cost, the elimination of corrosion and costly chemical assistants and the elimination of unpleasant odors and civic nuisance, according to Atlantic.

Armed Forces Chemical Ass'n Hears Javits Nov. 3

Jacob Javits, Attorney General of New York State, has accepted an invitation to address the annual dinner meeting of the Armed Forces Chemical Association, according to an announcement by S. Askin, president of the New York Chapter. The dinner will be held November 3 at the Delmonico hotel, Park avenue at 59th street, New York. Mr. Javits will discuss the mutual interests of the Chemical Corps and the chemical industry. Reservations may be made through W. E. Spicer, Lambert Pharmacal Company, 930 Newark avenue, Jersey City, N. J.

French Chemical Group Will Hear John McKeen

John E. McKeen, president of Chas. Pfizer & Co., Brooklyn, N. Y., will speak to the American section of the Societe de Chimie Industrielle on the topic "Building an American Plant for France." Mr. McKeen will be the guest speaker at a dinner of the group on October 31 at the Chemists Club, New York. A cocktail hour preceding the dinner will start at 6:30 p.m.

Pennsalt Transfers Hawley

John E. Hawley has been transferred to the technical service department of the chemical specialties division of Pennsylvania Salt Manufacturing Company, Philadelphia. A research chemist at Pennsalt's Whitemarsh research and development laboratories for the past three years, Mr. Hawley will serve as a technical service engineer for dairy sanitation, metal processing and maintenance chemicals. His work at the Whitemars laboratories concentrated on the latter field.

Chamber of Commerce Fills Positions for Atomic Energy

The Chamber of Commerce of the United States has announced the appointment of its 1955-56 committee on commercial uses of atomic energy.

Among the members in the chemical and related industries are:—William C. Foster, executive vice-president, Olin Mathieson Chemical Corporation; G. R. Gottschalk, Syracuse Industries Division of Union Chemical & Materials Corporation; Clyde Williams, president and director of Battelle Memorial Institute, Columbus, Ohio, and Walter H. Zinn, director of Argonne National Laboratory, Lemont, Ill.

Bjorksten Changes Name

Bjorksten Research Laboratories for Electrochemistry, Inc., has changed its name to Bjorksten Research Laboratories for Industry, Inc. The firm's address is Post Office Box No. 1175, Madison 1, Wis.

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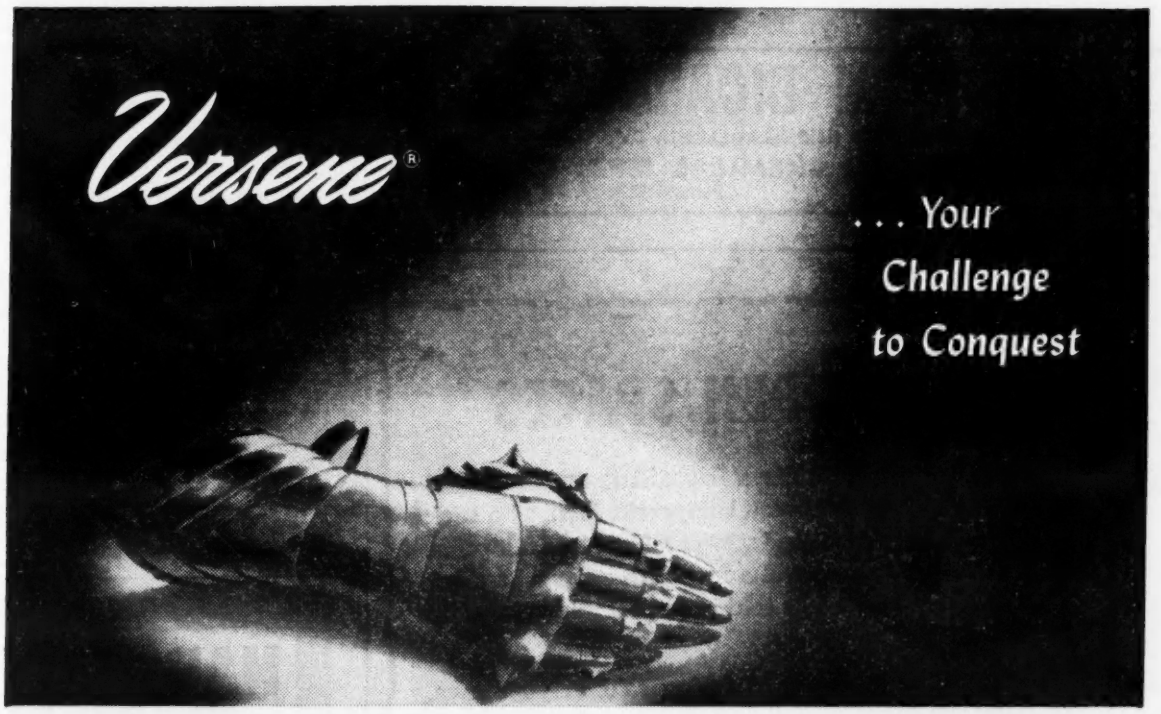

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VERSEN-OL is a technical grade of the trisodium salt of N-hydroxyethylethylene diamine triacetic acid. It is a very effective agent for chelating trivalent iron from pH 7 to pH 10. It forms strong 1:1 ferric chelates. After chelating the iron it will then chelate other heavy metal or alkaline earth ions. (Available as liquid or powder)

VERSENE Fe3 SPECIFIC is the most powerful chelating agent known for *iron* in the alkaline pH range. It also chelates copper, nickel, cobalt, and zinc. (Available as 47% solution)

VERSENE Fe3 is a combination of VERSENE and VERSENE Fe3 SPECIFIC. It chelates both iron and other metallic ions. (Available as liquid or powder)

VERSENE-T chelates ferric and divalent metal ions including hard water salts in *any* caustic solution. (Available as 55.5% solution)

VERSENE-9. This is a technical grade of the trisodium salt of EDTA. It has a pH of 9.3 in solution at 1% concentration. 1 gram chelates a minimum of 242 mgms. of $CaCO_3$. Its general chemical reaction is identical to Versene.

VERSENE IRON CHELATE is an agricultural Versene to correct iron deficiency and cure chlorosis in citrus and other green growth occurring in *acid* soils. It is the disodium iron chelate of EDTA absorbed into inert vermiculite for convenience in application. (Available in 50 lb. bags)

VERSEN-OL IRON CHELATE for agriculture is the monosodium iron complex of Versen-OL. It contains 19% min. of iron chelate calculated as NaFeEEDTA, (4.29% Fe as Fe_2O_3). Balance inert. Cures iron deficiency in plants growing in *any* soil. (Available in 50 lb. bags)

VERSENE — MADE FOR YOU — When you have a problem involving excesses or deficiencies of metallic ions in solution the Versene products can help you. They can selectively track down and inactivate traces of practically any ionized metal (Mn, Pb, Ca, Cu, Zn, Fe, etc.) in solution. As precise and powerful chelating agents, they give mole-for-mole control over cations. They may be used for many separations including the rare earths. Also, for the preparation of metallic chelates, especially useful in the polymerization of rubber, plastics, etc. Especially important is their use in the development of new analytical procedures and techniques. It will pay to investigate. Ask for technical data and sample.

WAREHOUSE STOCKS

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Berode & Page, Inc., Houston, Dallas, Corpus Christi, Odessa, New Orleans, St. Louis, Wichita, Oklahoma City, Tulsa, Kansas City, Mo.
George Mann & Co., Inc., 251 Fox Point Blvd., Providence, R. I.
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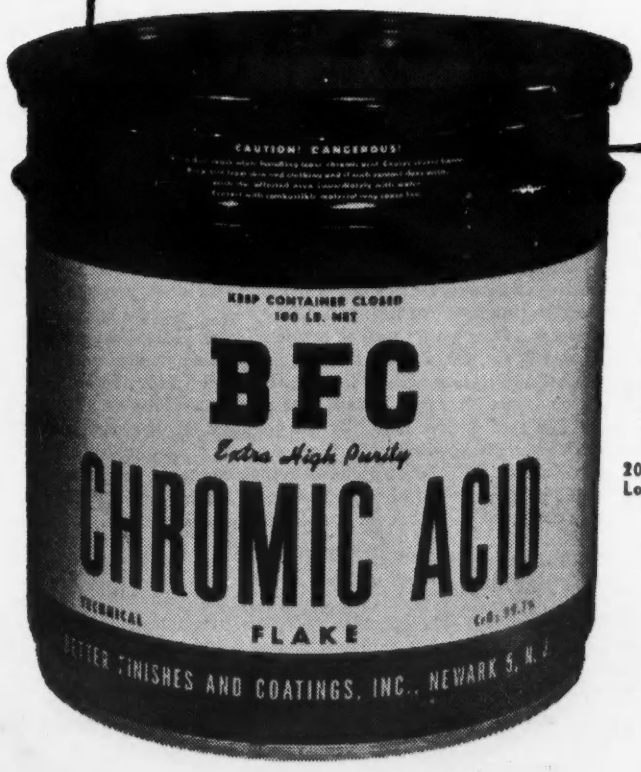

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CCC Will Buy Peanuts For Oil Use and Export

The Department of Agriculture last week announced that the Commodity Credit Corporation will purchase No. 2 shelled peanuts for diversion into oil or for export as a supplement for the 1955 price support loan program on farmer's stock peanuts. The diversion purchases will be made from commercial sellers and will be limited to No. 2's.

Prices will range from 14.5 cents per pound for runner, southeast Spanish and southwest Spanish types and 14.75 cents for Virginia type peanuts containing damaged kernels of 2 percent to a low of 12 cents a pound for the Virginia type and 11.75 cents for the other types of peanuts containing the damaged kernels of 7 percent.

The department also announced a national allotment of 1,610,000 acres of 1956-crop peanuts for picking and threshing and a marketing quota of 719,670 tons. The marketing quota and the national acreage allotment for the 1956 crop are at the minimum levels permitted by law.

Hercules Building Center For Technical Information

Hercules Powder Company, Wilmington, Del., announced last week that it will build a technical information center at its experiment station, Lancaster Pike, to cost approximately $1,000,000. Construction of the building got underway immediately when the contractors began surveying and preparatory work. When completed, the 35,000 square feet of floor space in the new structure will make it possible to centralize in one location all facilities of Hercules' technical information division.

Freeport Sulphur Company Elects Two Vice-Presidents

R. Kirby Shirley and Pearson E. Neaman have been elected senior vice-presidents of Freeport Sulphur Company, New York. Mr. Shirley, who also is treasurer of the company, has been with Freeport since 1922, having held various executive positions in Texas and New York. He became a member of the board in 1948. Mr. Neaman, general counsel of the company, joined the organization in 1930 as secretary. He was elected a member of the board in 1948.

Calspray Foreign Sales Mgr.

Melvin E. Wierenga has been made manager of its newly-formed foreign sales department by California Spray-Chemical Corporation, Richmond, Calif. Mr. Wierenga, with the company for over eight years, as foreign sales manager will be head of Calspray's fifth operating department. Richard B. Auer, formerly manager of the smaller foreign sales division of the marketing department, has been named manager of the Western Hemisphere-Orient division of the foreign sales department.

Stein, Hall & Co. Reports Two New Starch Products

Development of two new starch products designed to meet a growing demand for higher production speed in the corrugating industry has been announced by Stein, Hall & Co., New York. The new products, "Bondcor S" and "Bondcor D," are for the dual viscosity paste system which is growing in popularity throughout the industry. Stein Hall was instrumental in developing this technic and has supervised its installation in a number of plants.

"Bondcor S" is used at the single facer while "Bondcor D" is applied at the double backer. Both are converted corn starches and offer numerous advantages over ordinary corn starch, including a substantial cost-savings potential, according to the producer.

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Pesticide Tolerance Okayed, Applications for Others Filed

The Food and Drug Administration, in recent announcements, approved a tolerance for residues of a chemical pesticide on certain raw agricultural commodities and gave notice of the filing of application for tolerances for residues of certain other chemical pesticides as follows:—

Approval was given to a tolerance of one part per million for residues of 3-(p-chlorophenyl)-1, 1-dimethylurea on asparagus, cottonseed, onions (dry bulbs only), pineapple, spinach, and sugarcane.

Food Machinery & Chemical Corporation, Middleport, N. Y., filed a petition for a tolerance for residues of piperonyl butoxide [(butyl carbityl) (6-propyl piperonyl) ether] at twenty-seven parts per million and for residues of pyrethrins at 2.7 parts per million in or on corn, wheat, buckwheat, oats, barley, rye, flaxseed, rice, popcorn, peanuts, beans, and peas.

Dow Chemical Company, Midland, Mich., filed a petition for a tolerance for residues resulting from the use of ethylene dibromide to fumigate soil ranging from five parts for million for lima beans, strawberries and sugar beets, to 100 parts per million for sugar beet tops, carrots, carrot tops and celery, and to 200 parts per million for cottonseed.

Chemagro Corporation, New York, filed a petition for a tolerance for residues of "Systox" [o, o-diethyl-(2-ethylmercaptoethyl) thiophosphate, a mixture of the thiono and thiol isomers] of .75 part per million on beans.

Copper Materials, Aluminum Scrap Given Export Quotas

Fourth quarter export quotas for certain copper raw materials and aluminum scrap were announced last week by the Bureau of Foreign Commerce.

A quota of 3,000 short tons was established for new and old copper scrap; 6,000 short tons (copper content) for new and old copper base alloy scrap containing 40 percent or more copper, and 600 short tons (metal waste) for copper based alloy ingots and other crude forms. Comparable quotas for the third quarter were 2,750; 5,500, and 550 short tons, respectively.

Exports of refined copper of foreign origin, except that produced from Canada ore, will be unrestricted whereas during the third quarter, such exports were limited to 54,000 short tons. Third quarter limitations imposed on exports of other copper raw materials will continue in the fourth quarter.

The fourth quarter export licensing of new and old aluminum scrap, including remelt ingots, will be limited to a quota of 4,000 short tons. This is a reduction of 1,000 tons from the quota of the previous quarter. Export licensing of primary and secondary ingots and similar crude forms will continue unrestricted.

Nitrogen, Phosphates

—Continued from page 3

30,000 tons of natural organics, or a total of 2,167,000 tons from which 198,000 tons will be exported, leaving a net supply from domestic resources of 1,969,000 tons. This compares with the net for 1954-55 of 1,842,000 tons made up of 1,789,000 tons of synthetic, 178,300 tons of by-product, and 30,000 tons of natural organics or a total of 1,997,300 tons from which 155,000 tons were exported.

The 2,300,000 tons of phosphoric oxide for 1955-56 will come from 2,235,000 tons of domestic production and 65,000 tons of imports. Total domestic production is expected to reach 2,445,000 tons, but 210,000 tons will be exported. In the 1954-55 crop year, the net supply amounted to 2,312,000 tons consisting of 2,242,000 tons of domestic production after exports of 169,000 tons, plus 70,000 tons of imports.

Potassium Oxide Supply

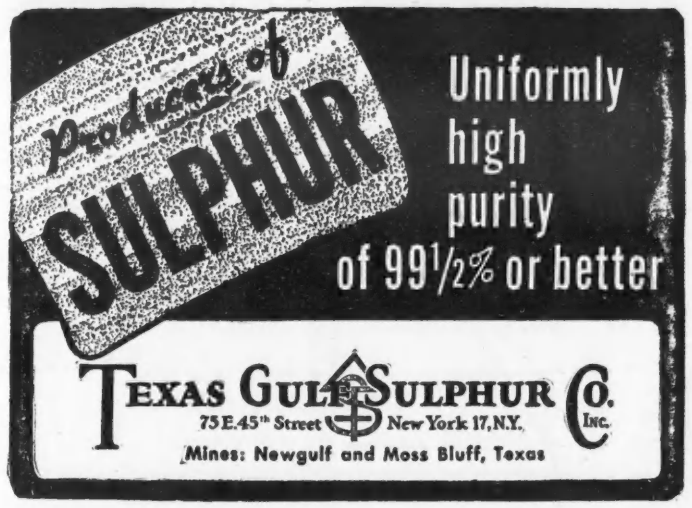
The total supply of potassium oxide will consist of 1,947,000 tons of domestic production, minus 146,000 tons of exports, for a net supply from domestic sources of 1,801,000 tons, to which must be added 138,000 of imports. In the 1954-55 crop year, the total supply amounting to 1,865,000 tons consisted of 1,821,000 tons from domestic sources, 97,000 tons exported for a net total of 1,724,000 tons to which was added 141,000 tons of imports.

The report estimated total capacity of the nitrogen industry by July 1, 1957, at 4,367,000 tons, as against 3,916,000 tons estimated for July 1, 1956, and 3,290,000 tons on July 1, 1955. If Canada's industry is considered, the total nitrogen capacity for the two countries by July 1, 1957, will be 4,876,000 tons against 4,310,000 tons July 1, 1956, and 3,629,000 tons July 1, 1955. Nitrogen consumption for the United States and Canada for the year ended June 30, 1954, was estimated at 1,889,000 tons, as against 1,681,000 tons for the year ended June 30, 1953.

Sun Names F. L. Johnson, Completes New Texas Lab

Appointment of F. L. Johnson as director of production research and development for Sun Oil Company, Philadelphia, it was announced this week. The appointment marks a reorganization of the research program of Sun's production department, and coincides with the completion of a laboratory at Richardson on the outskirts of Dallas, Tex. The lab will be opened officially later this fall.

Preston E. Chaney, formerly manager of the Beaumont, Tex., production laboratory, has been appointed assistant director. H. W. Perkins has been appointed to succeed Mr. Chaney as laboratory manager at Beaumont. Dr. R. J. Cordell, formerly of the Abilene laboratory, has been appointed acting manager of geological research and has moved his headquarters to the new Richardson laboratory.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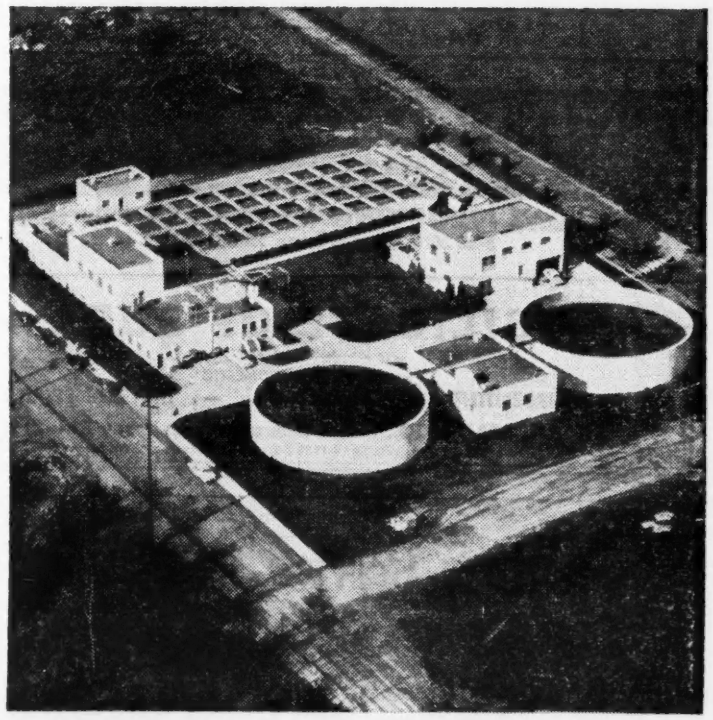

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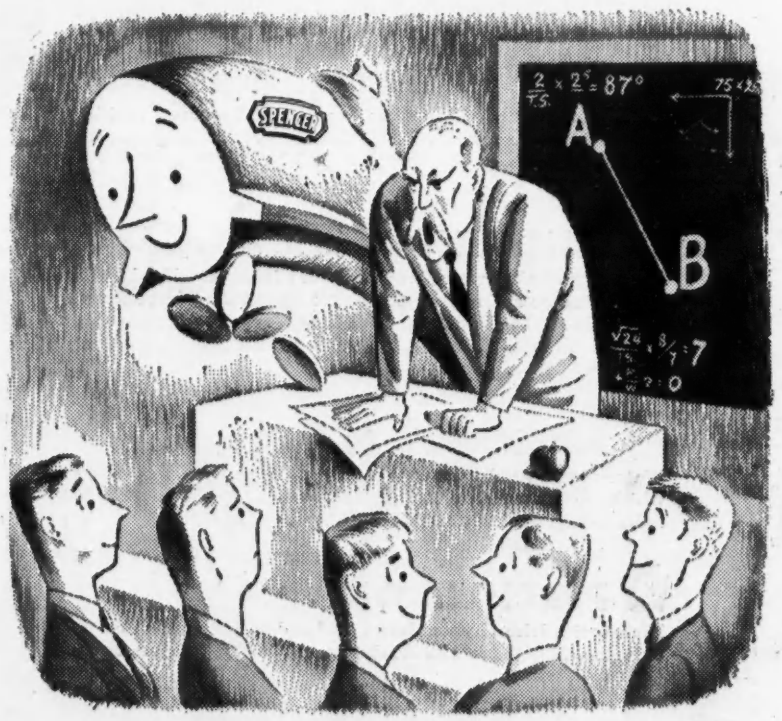

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Int'l Minerals Shifts Three At Florida Research Station

Dr. Roger Bart has been appointed manager of International Minerals & Chemical Corporation's research experiment station at Mulberry, Fla., according to an announcement by Dr. Paul D. V. Manning, vice-president in charge of the Chicago corporation's research division. Dr. Manning also announced the appointments of W. B. Williams as supervisor of chemical process development and F. N. Oberg as supervisor of coordinating services at the Florida experiment station.

Dr. Bart joined the staff of the experiment station as chemical engineering group leader in 1951. For the past two years he has been supervisor of chemical process development. Before joining International he was a chemical engineer with the research and development divisions of the Standard Oil Development Company and E. I. duPont de Nemours & Co.

Mr. Williams had been chemical engineering section leader. He joined International's research division staff in 1953. He was formerly a member of the research department of Phillips Petroleum Company and of the chemical engineering department of the Tennessee Valley Authority.

Mr. Oberg has been associated with the chemical engineering and ore dressing departments of International's research division since he joined it three and one-half years ago. In his new position he will be in charge of the analytical chemistry, maintenance and purchasing sections at the Florida experiment station and will also serve as technical assistant to the manager.

DuPont Licenses Eastman To Make Polyester Items

E. I. duPont de Nemours & Co., Wilmington, Del., has announced that it has licensed Eastman Kodak Company, Rochester, N. Y., to manufacture polyester photographic base and film under duPont patents. The license, which is non-exclusive and non-transferable grants Eastman and its subsidiaries the right to make polyester film base and use it in making photographic film.

The duPont photo products department developed the polyester film base following earlier fundamental work on polyesters carried out in this country by duPont's Dr. Wallace H. Carothers and his associates and in England by Whinfield and Dickson. Wide scale tests have been established that the new base is very strong and has great dimensional stability. DuPont has been producing pilot plant quantities for the past three years and is currently starting up a large scale unit to manufacture the new base at its Parlin, N. J., plant, where existing facilities will be used to convert it into finished photographic film. DuPont has given its polyester base and the photographic film made therefrom the trademark "Cronar."

Molybdenum Use Upsurge Noted In Booklet Published by Climax

A 600 percent increase in the use of molybdenum in catalysts over the past two years is reported in "Molybdenum Catalysts for Industrial Processes," a twenty-four-page booklet published by Climax Molybdenum Company, New York. Currently 1,200,000 pounds of molybdenum are going into catalysts as contrasted with 200,000 pounds two years ago, the booklet stated.

Characteristics of molybdenum catalysts reported to be responsible for this rapid growth are selectivity, high activity, nonpoisoning qualities and comparatively low cost. The latter factor is epecially important in keeping down the costs of catalyst losses in fluid-bed processes, and actually makes the fluid-bed method feasiable. Copies of the booklet may be obtained from the company at 500 Fifth avenue, New York 36.

Monsanto Names Cooper To Research Division Post

The appointment of Willis M. Cooper as an assistant general manager of the research and engineering division of Monsanto Chemical Company, St. Louis, Mo., has been announced by J. Russell Wilson, Monsanto vice-president and general manager of the division. Mr. Cooper will be responsible for the engineering activities of the division. He has been director of the division's engineering section. The other functions of the research and engineering division will continue under Dr. N. N. T. Samaras, assistant general manager.

Mr. Cooper joined Monsanto in 1935 as an analytical chemist in the company's John F. Queeny plant. He has served in a number of capacities in that plant and at the company's Texas City, Tex., operation where he was a process engineer. He returned to St. Louis in 1943 as a member of the general engineering department. In 1946 he was named assistant to the managing director of Monsanto Chemicals, Ltd., London. In 1950 he became assistant director of the company's general engineering department in St. Louis and in 1954 he was named director of engineering in the research and engineering division.

Emery Industries Appoints

Paul Bogner has been assigned to the Chicago district sales office of Emery Industries, Inc., Cincinnati, Ohio. The area under Mr. Bogner's jurisdiction consists of Minnesota, Wisconsin, the northern half of Iowa, northern Illinois and part of metropolitan Chicago. Prior to joining Emery Industries, Mr. Bogner was associated with the sales organizations of Inland Wire Company and Charles Pfizer & Company.

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Agricultural Chemicals

The strike affecting one producer in the Florida phosphate area was settled recently, and the mining and manufacture of phosphate rock, normal and triple superphosphate, and other related materials was reported returning to normal. Trade sources expect to see a loosening of the tight supply status of higher grades of rock in a short time. There have also been some announcements of increased production and development of new facilities by producers.

The animal proteins were generally steady, with last week's increases in dried blood and tankage being absorbed with little difficulty. Demand was fairly good. Fishmeal and fishscrap were still unavailable in most areas. Bonemeal and hoofmeal buying was said to be normal with prices holding firm. A buildup of inventories in many products was noted.

Demand for anhydrous ammonia was said to be slower, with the industrial buyers keeping the market in whatever condition of firmness presently in effect. Ammonium nitrate suppliers stated that inventories were large, with export business slightly better than was expected. Ammonium sulfate was in the same status. Prices for these materials were steady.

A reduction in the clarified grade of technical chlordan highlighted the pesticide market last week. Effective October 1 the clarified grade price was changed to 69 cents per pound marking a 6 cent reduction. The agricultural grade remained at 65 cents per pound. The market for the other pesticides was described as spotty, especially on the domestic scene. The export market still maintained fair demand for most products. BHC prices were subject to some shading, along with DDT listings. Stocks were being built up by producers for the spring buying surge.

Price Trends

Advanced

Nitrogenous sewage sludge, 25c. per unit of ammonia.

Reduced

Chlordan, clarif. grade, 6c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
111.25	111.23	110.78	110.77

(For Current Prices see Page 9)

Animal and Plant Foods

Ammonia, Anhydrous—Demand was reported slower than during the peak season. The movement of anhydrous ammonia to fertilizer grade users was described as rather slow in most areas. Industrial grades were reported to be showing good activity in the market, and were expected to be strong throughout the rest of the year. Prices were stable.

Ammonium Nitrate—Producers reported that supplies were plentiful. Export business was said to be doing fairly well. On the whole, however, the market was seasonally dull. Sales of ammonium nitrate in Kentucky for the six-month period from January to June 1955 totaled 18,090 tons, reported the Department of Feed and Fertilizer at Lexington. This total compares with the sale of 7,674 tons for July thru December 1954, or a twelve month total of 25,764 tons.

Ammonium Sulfate—The total production of this material for the month of July was 80,089 short tons, according to the Bureau of Census. For June the total was higher at 90,735 short tons, and in July of last year the production total was 74,302 short tons. The report also listed the amount of stocks at producing plants. At the end of July the amount of stocks was 67,694 short tons compared to 47,570 short tons as of June 30.

Animal Protein—Dried blood remained at last week's new level of $5.75 per unit-ton in New York and $6 per unit-ton in Chicago. Demand was said to be steady with present conditions likely to continue into the final quarter. Bonemeal was firm in most areas in both price and demand. Hoofmeal buying was said to be normal with no change in prices. Tankage was in about the same condition as other products with last week's advances in price taking effect in most areas. Demand was good.

Castor Pomace—Listings were still nominal at $40 per ton, f.o.b. sellers' works. Demand held up well, but consumers found material hard to obtain. The chief reason cited for the dearth of castor pomace was the small amounts of domestic oil being produced because of competition from importers of Brazilian oil.

Nitrogenous Sewage Sludge — Last week's price advanced 20c. per unit of ammonia. The new listing of $2.95 per unit of ammonia plus 50c. per unit of a.p.a. was made in prices current. Demand was said to be holding up very well and is expected to maintain its present position for most of this year and early next year.

Phosphate Rock—The four-month-long strike of a major producer in Florida has been settled, it was announced last week. As full scale operation in the plants resumed, a producer announced that there will be an expansion of facilities and substantial increases in the production of triple superphosphate and dicalcium phosphate, and in shipping facilities.

Trade sources were of the opinion that it will be a little while before the tight supply position in high grade rock caused by the strike is eliminated and production returns to normal. Meanwhile, lower grades of phosphate rock were plentiful. Normal and triple superphosphate also apeared to be in fairly good reserve. There was some pickup in demand for fall mixing, but only to a slight degree.

Urea—Industrial grades were still in good position. Apropos of the fall season, agricultural demand was rather slow. Production for July totaled 42,776,220 pounds, compared with 34,175,986 pounds for June, according to the Bureau of Census.

Los Angeles Market

Los Angeles.—No price changes were reported for inorganic materials. Supplies were well maintained for most items with improved buying interest noted. Organics continued to firm with increased demand. Fish meals remained in tight supply due to strike conditions with no import offerings on the market.

Pesticides

Rangeland damage caused by grasshoppers in New Mexico was said to be quite serious, according to the Cooperative Economic Insect Report. Infestation of European corn borers in South Dakota has decreased somewhat since the last report. It now averages about 34 percent infestation in central regions compared with 90 percent some weeks ago. The fall armyworm was reported causing serious damage to fall sweet corn plantings in Oklahoma. Infestation approximated 100 percent.

Some cotton areas were still afflicted with boll weevils, especially in eastern Texas. Severe flooding caused by hurricanes and heavy rains has contributed to severe mosquito infestation in Massachusetts and Texas. Japanese beetles were very abundant in New England areas during the past month. Leafhoppers have caused severe damage in elms and redbuds in many parts of Oklahoma.

BHC—Current business was said to be fairly quiet on the domestic scene. Production of material was firm as many suppliers built up inventories in preparation for the spring and summer demand. The present export picture was somewhat better than the domestic scene. Prices were unchanged following recent reductions in low-gamma material.

Chlordan—On October 1 the price of clarified grade of technical chlordan was reduced 6c. per pound. The new listings for this material are:—clarified grade technical chlordan, drums, carlots, freight allowed, 69c. per pound; less than carlots, same basis, 70c. per pound. The agricultural grade did not change in price and is still listed at 65c. per pound, drums, carlots, freight allowed, and 66c. per pound for less than carlots quantities, same basis.

2,4-D—Exports were reported ahead of last year with the market for this herbicide growing steadily. The domestic market is seasonally slow, but expected to come back with wider usage next season. Prices have remained firm.

DDT—The domestic market was very spotty, partly because of the uncertainty of government requirements. Prices were reported to be ranging below the current 27c. listing, but no definite announcements on price changes have been made. Many producers were in the process of building up inventories in preparation for the spring buying surge. The export market was in better shape than the domestic.

For Late Market Developments, See Page 4

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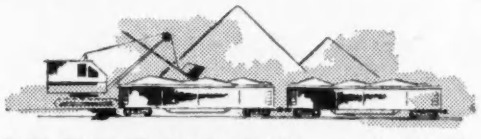

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Petroleum Derivatives

Lighter fraction quotations continued to climb with the quickening demand for winter heat. Though spot New York price listings remained as before, changes in the origin areas are signs of changes due in listings here.

The Group Three price, which changed on October 1, was followed by a Baton Rouge climb. The group three shift was a ½ cent shift, from 3 cents to 3½ cents per gallon. The Baton Rouge change also was a ½ cent change.

The present spot listing is 8 cents. The first price change of the season was a jump to 7½ cents on September 1.

The Waxes continue to show a fair market with partial aromatics showing a slight rise in sales. Producers attributed this to signs of improvment in the automotive industry paint market. Toluol continued to show a weak market, it was reported. Decline of government sales are considered the prime factor for the decline.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
104.32	104.32	104.32	104.42

(For Current Prices see Page 9)

Solvents and Diluents

Benzol—Sales remained relatively firm for this product with production even and stocks full. Paint sales to the automotive industry have climbed in some areas, giving producers hope for new strength in the direction of that market. Any variation within the automobile industry is felt by the producers of benzol, an industry spokesman noted. There were no variations in prices.

Cleaners Naphtha—This market is still fairly weak because of the slackening off of the seasonal market. Softness in the market place was also caused by the mediocre sales during the season. Production was down somewhat, due to minor stock piles amassed at the beginning of the summer. There were no price changes.

Heptane — Price listings for heptane continued unchanged. The prices were:—19c. per gallon in Bayonne, N. J.; 14¾c. per gallon in Baytown and Borger, Tex. There was no intimation of change, either in price, production or sales, producers noted. Production-wise, the heptane field might slide, however, with the high number of plants shutting down completely for the vacation periods.

Lacquer Diluents—Price listings continued at:—.169—.204 per gallon in Los Angeles; .19 per gallon in the New York, New Jersey area. Sales remained good, with the construction industry and home users buying nearly up to production capacity.

Rubber Solvent—A slight firming of the market was noted last week, with some advances in sales and production marked by producers. The firmness of the market for rubber solvent revolved about expanding automotive industry sales. Though not as dependent as many of the solvents upon the economic cycle of the automobile industry, rubber solvent, in order to have a really firm market, must lean upon it, one producer noted. There were no quotation variations.

Toluol—Price listings per gallon for toluol, which continue unchanged, are:—Albany, N. Y., .35; Bayonne, N. J., .34; Baytown, Tex., .33; Chicago, Ill., .35; Detroit, Mich., .35; Houston, Tex., .33; Philadelphia, 34; Providence, R. I., 35; Wood River, Ill., .35.

A slackening of interest in this market, making for a definite softness last week, it was reported. Production is still moving at its old level. Cause of the falling off is a decline in government sales, due in turn to an excess of government stock, one producer noted. There were no price changes.

Lighter Fractions

LPG's—Another jump in price for propane, the second since the end of the summer. In group three prices jumped, from 3c. to 3½c. The change was effective, the first of the month. Baten Rouge listing climbed a half cent also, effect the 7th. The spot New York price listing remained at its 8c. level. Earlier changes had occurred when major producers had bumped the spot listing a half cent on September 1. Production figures have been climbing steadily, alongside those of sales. Stocks have been sinking slightly, with the upsurge in sales.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended September 24 totaled 254,634,000 barrels according to data reported to the Bureau of Mines. Compared with the total of 255,463,000 barrels for the preceding week this represents a decrease of 829,000 barrels comprising an increase of 129,000 barrels in stocks of domestic crude and a decrease of 958,000 barrels in stocks of foreign crude.

Waxes

Microcrystalline—The market continued steady, with variations absent in both production and sales. Quotations also remained stable. Buyers queries from South America, producers noted, were intensified last week, and may be the first signs of a sales upsurge in this area.

Paraffin—Prices for crude scate continued at .0710 per lb. Price range for fully refined ran from .0710 to .0855 per lb. The wax covered container market emained steady and good with some signs of a sales rise, though producers noted that the rises were in isolated areas and not general. Stocks were not particularly high, with most production going direct to the distributor. Production and sales throughout the field, however, remained on a steady even level.

Miscellaneous

Crude oil production during July was 6,632,000 barrels daily according to a report by the Bureau of Mines. Stocks of domestic crude during the month ran to 226,000 barrels; demand averaged 6,858,000 barrels daily. Actual crude runs in July averaged 7,580,000 barrels daily, including 807,000 barrels daily of foreign crude. Current data for August show total crude runs of about 7,580,000 barrels daily, including runs of foreign crude of 760,000.

Imperial Oil, Ltd. (Alberta, Canada) has increased its posted price for Virden area, Mississippi crude oil 2c. per barrel effective October 1. The new posting is $2.34.

August production of petroleum in Iraq totaled 2,179,528 long tons compared with 1,919,097 in July. This made the 1955 output up to the end of August 15,938,696 long tons compared with 15,615,844 in the corresponding period last year.

Basrah Petroleum Company had August production figures of 617,567 long tons against 603,162 long tons in July. Current total up to the end of August was 4,508,867 compared with 2,889,422 in the same period of 1954. Mosul Petroleum Company produced 111,539 long tons in August against 104,346 in July. Total production up to the end of August yielded 853,417 long tons compared with 865,928 in the same period of 1954.

Petrolatum—This product continued with prices unchanged from the previous listing. Demand has increased somewhat, however, and production has risen to keep apace. Stocks are down. The last price change occurred early in September with a quarter cent increase throughout.

Los Angeles Petroleum Market

Los Angeles.—Demand for high melting point paraffin waxes continued to hold at a good level. Production was well maintained although no grades were reported in particular surplus. 127/131 ASTM, slabs loose, fully refined, f.o.b. refinery, San Francisco Bay area, quoted .0845 per pound. 140/147 ASTM, same basis, listed .0775 per pound. 157/162 ASTM, same basis, quoted .093 per pound. All listings 10,000 pound minimum. Add .007 per pound for cartons. Tankcar prices listed .0755, .0685 and .084 per pound respectively.

The LPG market was relatively unchanged although somewhat more interest was reported for propane. Stocks were ample with postings unchanged at .059 per gallon, tankcars, f.o.b. Los Angeles. Interest in butane continued steady with quotation firm at .069 per gallon, tankcars, f.o.b. Los Angeles.

Interest in cleaning solvents showed little improvement over the week with stocks in ample supply. Listings were unchanged at 19.7c. per gallon, 400 gallons or over, ex-tax, f.o.b. Los Angeles Basin area. Demand for lacquer diluents and light paint thinners, quoted 20.7c. per gallon, same basis, continued to hold at a moderate to good level. Supplies were adequate to meet all requirements.

For Late Market Developments, See Page 4

Cutting Oil Tax Changes Noted by Revenue Service

The Internal Revenue Service has called attention to the changes made by public law 355, recently enacted by the Eighty-fourth Congress, in the law applicable to the manufacturers excise tax on cutting oil.

The amendments, effective October 1, change the rate of tax on cutting oil to a flat three cents per gallon, while continuing the six cents per gallon rate on other lubricating oil. When lubricating oil for which the six cents per gallon tax has been paid is, on or after October 1, used or resold for use as cutting oil, the amendments provide for a credit or refund to the manufacturer (without interest) not to exceed three cents per gallon.

Effective October 1, cutting oil is defined to mean oil sold for use in cutting and machining operations (including forging, drawing, rolling, shearing, punching, and stamping) on metals. The tax on cutting oil sold or used prior to October 1, 1955, is six cents a gallon or 10 percent of the manufacturer's selling price, whichever is less. On and after October 1, 1955, cutting oil is subject to a specific rate of tax of three cents a gallon and the tax is unaffected by the price for which the cutting oil is sold.

Pending issuance of new regulations sales by manufacturers of lubricating oil for use in cutting and machining operations on metals at the three cents a gallon tax rate must be supported by certificates in substantially the form prescribed in existing regulations relating to sales of lubricating oil for nonlubricating use. The Revenue Service pointed out that lubricating oil may not be sold at the three cents a gallon tax rate to a purchaser for resale as cutting oil. In such case tax at six cents a gallon must be paid but the manufacturer who paid the tax may claim a credit or refund at the rate of three cents a gallon upon showing that the oil was resold to a consumer for use, or was used by a consumer, as cutting oil. Such credit or refund must be supported by certificates in substantially the form prescribed in existing regulations for use in the case of credit or refund of the tax paid on lubricating oil which was used or resold for nonlubricating purposes.

Conoco Completes Facility At Ponca City, Oklahoma

Completion by Continental Oil Company, Houston, Tex., of a $500,000 research pilot plant built at Ponca City, Okla., around an unused oil storage tank, was announced last week. The plant's primary usefulness will be in exploring better processes for manufacturing petrothe research laboratories and in helping create new chemicals for making synthetic soap detergents, plastics and other products.

The dismantled and reassembled 80,000-barrel tank is faced with aluminum and porcelain enamel and inside, has a spachemical products already developed in cious and circular open area, approximately sixty feet in diameter, and extending from floor to ceiling, which serves as the pilot area. Here many-sized kettles are used for pilot or test runs of promising chemical products, designed to develop economical manufacturing methods for these products.

Texas Eastern Merger Set

The directors of Texas Eastern Production Corporation and Texas Eastern Transmission Corporation last week approved a plan to merge the production firm into Texas Eastern Transmission. Stockholders of the two firms will vote on the proposal on November 8. As a result of a recent exchange offer, Transmission now owns more than 93 percent of the outstanding stock of Production.

Silica Gel Booklet Offered

Davison Chemical Company division of W. R. Grace & Co., has issued a Technical Bulletin No. 201, "Dehydration of Air and Gas with Davison Silica Gel." This is a report on research in this field at Southwest Research Institute, a Carthage, Ill., natural gas plant, and Davison laboratories. It is available from the company's sales control department, Baltimore 3, Md.

Oil Progress Week Features TV Show, Movies, Speeches

Oil Progress Week got under way yesterday and will continue through Saturday featuring programs and special events designed to acquaint the American people more fully with the industry and its operations. Starting the week-long event last night was an hour-long television show over the National Broadcasting Company's network, sponsored by the American Petroleum Institute. The show featured such names and personalities as Fleet Admiral Chester W. Nimitz, Carl Sandburg, Sid Caesar, Nanette Fabray, Arlene Francis, and Wally Cox.

Another feature of Oil Progress Week this year will be public showings of the industry's new motion picture, "Barrel Number One." This is an educational film on the industry's operations—how oil is explored for, discovered, produced, transported, refined and consume.

Oil Progress Week will also feature thousands of special events in most communities, including parades, speeches, meetings, rallies, contests, and special editions of newspapers. Service stations, bulk terminals, and other oil installations will be decorated with banners, placards and other items calling attention to the celebration.

Atlantic's Marketing Unit To Be Headed by Longman

Appointment of Dr. Donald R. Longman as manager of marketing operations of Atlantic Refining Company, Philadelphia, has been announced. Dr. Longman joined the company in 1954, as director of the marketing research division.

Prior to going to Atlantic, Dr. Longman had been executive director of the business information division of Dun & Bradstreet, Inc., New York. Previously he had served as director of the rubber section and later of the service trade division of the War Production Board and marketing counsel at U. S. Rubber Company.

Obituaries

George Skakel, sr.

George Skakel, sr., chairman of the board of directors of Great Lakes Carbon Corporation, New York, was killed in a plane crash near Union City, Okla., on October 3. He was sixty-three years old. Mr. Skakel was one of the founders of Great Lakes Coal & Coke Company, Chicago, in 1919, which was reorganized in 1939 as Great Lakes Carbon Corporation, with headquarters in New York. Mr. Skakel was president of Great Lakes Carbon from its inception until 1953, when he resigned as president and was elected chairman of the board.

Sheppard Royster Cooke, secretary of F. S. Royster Guano Company, Norfolk, Va., died September 20.

Thomas E. Gregory, a former accountant at the Bayway, N. J., refinery of Esso Standard Oil Company, New York, died October 4 in Plainfield, N.J. He was sixty years old.

Dr. Henry Jordan, a retired chemist with E. I. duPont de Nemours & Co., Wilmington, Del., and an expert on azo dyes and colors, died October 5 in Pasadena, Calif. He was eighty years old. Dr. Jordan was born in Germany and came to this country in 1921. He was one of several chemists who developed the virtually nonexistant dye industry in this country after World War I. Dr. Jordan retired in 1941.

Harold Barton Stone, retired manager of lubricating sales for Atlantic Refining Company, Philadelphia, died October 2 in that city. He was sixty-five years old.

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Industrial Organic Chemicals

Last week a number of price changes which had been announced earlier went into effect on spot and contract sales. The price increases in carbon tetrachloride and trichloroethylene were directly related to a general hike in the price of chlorine and were not expected to affect consumption to any notable extent. Business in the past month was reported to have gone well, advance knowledge of the forthcoming price boosts stimulating consumer buying for inventory. Also included among price changes last week were changes in chloroform and methylene chloride. It was noted that the paint remover grade of methylene chloride has been discontinued and that former buyers of this grade will pay ¾ cent per pound more for a slightly higher grade material. Methyl chloroform price listings will be included in the OPD price section for the first time in this issue.

In addition to the foregoing items, price reductions were listed for ethyl and methyl acrylates, both of which were reduced 4¾ cents per pound in tankcars and 4½ cents in carlots and less than carlot quantities. Business continues to boom in many industrial organic chemicals. The high rate of production in the automotive industry was expected to assure a satisfactory demand for a host of chemicals well into the next quarter.

An excellent example of this would be ethylene glycol, which makes up approximately two-thirds of the anti-freeze market. Consumption of this glycol has been rising steadily and producers anticipated a further increase in its consumption. Demand for methanol, the other major chemical used in anti-freeze preparations was reported to be moving well with supplies adequate to meet industry needs.

Glycerin was in steady demand and the approach of the Christmas selling season has spurred its consumption especially in the cosmetic and pharmaceutical field. The rash of construction activity throughout most of the country has resulted in a heavy demand for dynamite, manufacture of which consumes an appreciable quantity of glycerin.

Alkyd resins were moving well as reflected in the brisk demand for glycerin from resin makers. Pentaerythritol was also in good demand from protective coatings producers.

Price Trends

Advanced

Carbon tetrachloride, ½c. per lb.
CP, l.c.l., ½c. per lb.
Trichloroethylene, ½c. per lb.

Reduced

Ethyl acrylate, 4¾c. per lb.
Methyl acrylate, 4¾c. per lb.
chloroform, ¼c. per lb.
Methylene chloride, tech., 1¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
130.73	130.87	130.94	132.06

(*For Current Prices see Page 9*)

Carbon Tetrachloride—Demand for this material continued steady following last week's price advance. The increase, which had amounted to ½c. per pound was not expected to affect consumption to any notable degree. Sizable shipments of carbon tetrachloride were bought in advance of the price hike and it was thought probable that there might be some slight decline in demand in future weeks as a result of the fact that large inventories have been built up.

Ethyl Acetate—Inquiry for this ester solvent was reported to be good, on the whole. Supplies were reported adequate to cover trade needs while prices were steady.

The high rate of automobile production has attributed much to the overall brisk demand for lacquer solvents. With production of the new models in full swing, consumption of ethyl acetate and other solvents was expected to run at a strong rate through the end of this quarter.

Ethyl Acrylate—Price schedules were reduced 4¾c. per pound in tankcars last week while truckload, carload and less than trucload prices were reduced 4½c. per pound. The new schedule on this compound, effective October 3, 1955, was as follows: tankcars, 34c.; carloads or truckloads, 36c.; less than truckloads, 37c. per pound.

Ethylene Glycol—The market continued tight last week. Demand was brisk and producers were reported to be running at high production levels in order to keep up with outgoing orders. With ethylene glycol accounting for approximately two-thirds of the anti-freeze market, the brisk demand for permanent-type anti-freeze this fall has been reflected in an increased demand for the glycol.

Compared to last year when there was a surplus of ethylene glycol, this year has seen demand rise to new heights. Of course the weather could put somewhat of a brake on demand if a mild winter were forthcoming. However, the bulk of anti-freeze canning operations have been completed and all virtually foreseeable business for this season should be in by the end of this month.

In spite of the heavy demand for glycol which has made the supply situation tight, new plant capacity for glycol manufacture is expected to come in this year which will increase the production of one major maker by some 60,000,000 pounds. Another large producer has another plant coming on stream later next year. These additions should boost capacity to its highest level.

There were reportedly several factors influencing the industry's move to boost ethylene glycol production. Perhaps foremost was the fact that the number of automotive vehicles in use in this country has been steadily on the rise, necessitating increased quantities of anti-freeze. Secondly, anti-freeze producers have been placing increased emphasis via advertising on the advisability of using fresh antifreeze every year rather than re-using the previous year's material as has been the practice of a substantial segment of car and truck owners. Finally, it was noted that the cooling system of many of the new, higher-powered cars have been made larger, thus necessitating greater consumption of glycol per car.

In addition to its use as an antifreeze, overall consumption of ethyline glycol was expected to increase as a result of its use in a number of other chemical products.

Glycerine—Demand was reported to be brisk. Production of synthetic and natural glycerin was at good levels while supplies were generally adequate to meet industrial needs. With the stabilization of the situation in the Argentine, imports of crude material were once again coming in and it appeared that supplies of both types would continue ample. Prices were firm.

Consumption of glycerin continues good in all directions. The pharmaceutical industry was reported to have boosted its consumption of glycerin seasonally. The cellophane industry continues to account for a substantial amount of glycerin while its major use, that of synthetic resins has been holding up quite well.

The Office of Defense Mobilization has reopened and raised the expansion goal for synthetic glycerin production. The expansion goal for domestic production of synthetic glycerine was increased 57,000,000 pounds to a total of 185,000,000 pounds of annual capacity for which applications for necessity certificates must be filed by June 30, 1956. No change was made in the natural glycerine portion of the goal.

The synthetic glycerine goal had been filled earlier this year when sufficient tax amortization certificates had been issued to build up the industry's capacity to the level then considered necessary by ODM. Since that time, however, one of the companies that applied for and received a certificate has indicated it probably will not go ahead with its plans. It is understood, however, that the 57,000,000 pounds added to the goal does not include the probability of this company dropping out.

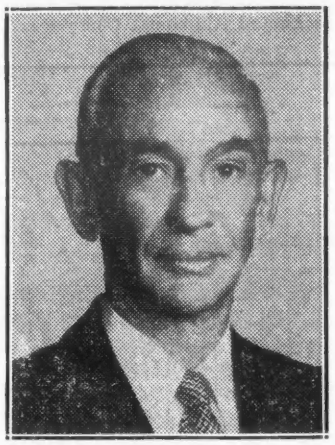
Methanol—Inquiry for methanol was reported to be running at good levels. With the antifreeze season at hand, demand from anti-freeze manufacturers was brisk.

Industrial or non-anti-freeze usage con-

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the Coal Chemicals market, while reports on fine and rare organic chemicals appear in the Drugs, Fine Chemicals, Botanicals market.

For Late Market Developments, See Page 4

Heads Union Carbide Buying



Sheldon V. Clarke has been named manager of the general purchasing department of Union Carbide & Carbon Corporation, New York. He succeeds H. V. Huffard who is retiring after forty years of service with the corporation. Mr. Clarke joined the Union Carbide organization in 1920, and left nine years later to join the Bradstreet Company as a vice-president. Mr. Clarke returned to Union Carbide in 1934 as purchasing agent, and in 1946 was made assistant manager of purchases.

tinued sizable. Production of formaldehyde remains a major outlet and with this compound in strong demand there has been a corresponding increase in the consumption of methanol going into its manufacture. Prices were unchanged.

Methyl Acrylate—Effective October 3, prices were reduced 4¾c. in tankcars and 4½c. in carloads, truckloads and less than carlots.

The new price schedule was as follows; tankcars, 37c. per pound; carloads and truckloads, 39c.; less than carloads, 40c. per pound.

Methyl Chloroform—This chlorinated solvent was included in the OPD price listings last week for the first time. The current price schedule for methyl chloroform or 1,1,1,-trichloroethane was as follows: tankcars, 12½c.; carlots, 13½c. and less than carlots, 16½c. per pound.

Pentaerythritol—Trade sources report inquiry to be running at satisfactory level with supplies ample to cover consumer requirements. By far the largest outlet for PE was in alkyds and surface coatings, which have been estimated to be taking some 90 to 95 percent of the overall output. The explosives outlet, i.e., pentaerythritol tetranitrate continues to account for an extremely small quantity of overall PE production and its share was not expected to increase.

Propylene Glycol—Consumption continued to run at a steady pace. Uses for propylene glycol are so numerous and diversified that producers are better able to gauge production schedules than is possible with chemicals which may have more seasonable shifts in consumption. Supplies of propylene glycol continue adequate to meet industrial requirements while prices were steady.

Trichloroethylene—Inquiry for trichloroethylene was reported good following last week's price hike. The increase was not expected to directly affect consumption although there may be some easing in normal demand as a result of heavy buying prior to the increase.

The new schedule was listed at 10¾c. in tankcars, 11¾c. in carlots and 13¾c. in less than carlots. The new listings for tankcars and carlots were on a f.o.b. plant, freight equalized basis. Less than carlot listings, however, were based on limited freight paid from stock points.

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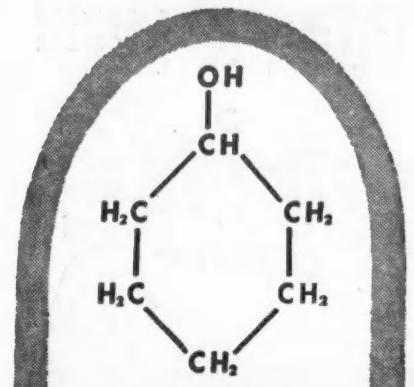

SPECIFICATIONS
(*Partial Listing*)

Boiling range at 760 mm.: 160.0°C. Min. to 162.4°C. Max.
Freezing Point: 23.0°C. Minimum.

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SPECIFICATIONS:

Methyl Acetate	60% min. (by wt.)
Methanol	40% max.
Color	Water white
Density	7.26-7.30 lbs. per gal.
Flash point	30° F.
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SALES AGENTS: Braun Corp., Braun-Knecht-Heimann Co., Charles L. Burks & Co., R. T. Freeman Co., Harry W. Gaffney, Harwick Standard Chemical Co., A. B. Kohl Sales Co., Moreland Chemical Co., Seaboard Chemical Co., Thompson-Hayward Chemical Co., Van Waters & Rogers, Inc.
EXPORT: Airco International, New York City

Upjohn Sets Up New Firm, Its Fourth Foreign Subsidiary

Upjohn Company, Kalamazoo, Mich., has formed a wholly-owned Mexican subsidiary, its fourth foreign unit. Called Upjohn de Mexico S. A. de C. V., the new firm is expected to start up operations by December 1.

Upjohn products have been marketed in Mexico for a number of years through agents and distributors. The new organization is expected to enable the company to participate more fully and effectively in all phases of pharmaceutical development and distribution in that country.

Heading up the new company, which will have its headquarters in Mexico City, is Robert S. Jordan as president. Henry B. Roberts will serve as vice-president, while Robert M. Boudeman and Lewis R. Long will be secretary-treasurer and general manager, respectively.

Upjohn's other foreign companies are Upjohn Company of Canada, Toronto; Upjohn Company of England, Ltd., London, and Upjohn de Brasil Produtos Fharmaceuticos', Ltda., Sao Paulo.

Asbestos Handler Denied Export Privileges of US

Zemanek & Co., Ltd., an import-export company of London, England, and its directors, P. Fisher and Franz Gintz, have been temporarily suspended from all United States export privileges for alleged trans-shipment of asbestos to Czechoslovakia, the Bureau of Foreign Commerce has announced.

BFC said it has grounds to believe that in mid-1955 Zemanek, while under previous suspension from United States export privileges, purchased asbestos from an American exporter, instructed him to ship the material to West Germany, a destination to which the shipment could be made under general license, and concealed the true destination for which he knew an individual export license was required. Subsequent investigation disclosed that Zemanek had sold 8,000 bags of the asbestos, value at $16,480, to a consumer in Czechoslovakia, it was reported.

Pfizer's English Facility For Antibiotics Is Opened

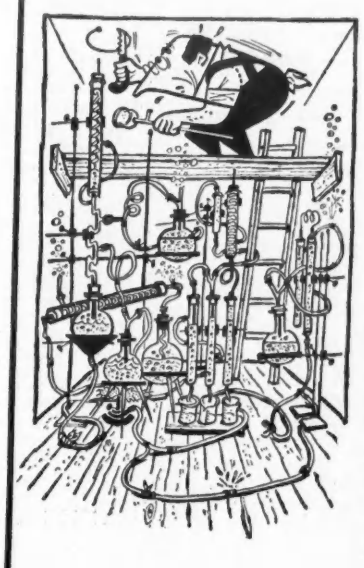
Chas. Pfzer & Co., Brooklyn, N. Y., has formally opened a broad-spectrum antibiotics fermentation plant at Sandwich, England. The plant, geared to the production of broad-spectrum antibiotics, including "Terramycin," represents one of Pfizer's largest investments overseas, it was reported. The plant is situated on an eighty-acre site and comprises 120,000 square feet of plant space. Capital invested in the project totals over $7,000,000.

Sulfur Taken From Surface

Contential Sulphur & Phosphate Corporation's new $1,500,000 mill at Sulphardale, Utah, has launched what it calls "the first commercially practical operating for extracting sulfur from surface ores. The new type of sulfur, he said, commands a price about double that for the common brimstone variety.

Sun Chemical Adds Director

Fred Adams, president of G. M. Basford Company, has been elected to the board of directors of Sun Chemical Corporation, Long Island City, N. Y., it was announced today. With Basford since 1942, Mr. Adams has been president of the agency since 1953. Before joining Basford, he was assistant advertising manager of Mathieson Alkali Works. He is a director of Fairmount Aluminum Company.



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Textile and Leather Chemicals

Consumers continued to absorb sizable lots of textile and leather chemicals last week. Most of the trading was for prompt needs, though more interest was reported in later requirements. Prices were maintained at current levels for most items, with the exception of potato starch which was unsettled by a large prospective new crop production. Sago flour was stronger on spot, reflecting the higher cost of replacements.

Trading in potato starch was reported at slightly lower prices for prompt shipment from Maine. Producers claimed that current low prices have about reached cost of production levels and were seeking loans to enable them to place stocks in storage in order to stabilize the market. Tapioca flour was in good request for shipment from Brazil and on the spot.

Trading in tanning materials continued spotty, though tanners showed more interest in forward requirements. Heretofore demand was restricted to prompt shipment. Primary markets were unchanged and steady.

The August rate of fiber consumption on the woolen and worsted systems was 21 percent above July and 7 percent above August, 1954, according to the Census Bureau. Weekly average raw wool consumption in August was 8,393,000 pounds (scoured basis), 23 percent above July, and 2 percent above August, 1954. The rate of consumption of carpet class wool increased 56 percent compared to the previous month and 13 percent above August, 1954, while consumption of apparel class wool was 12 percent higher than July but 2 percent below August of last year. Consumption of fibers other than raw wool averaged 5,833,000 pounds, 18 percent above the July average, and 15 percent above the average of August, 1954.

Price Trends

Advanced

Sago flour, ¼c. per lb.

Reduced

Potato starch, Maine, 1/10c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
104.27	104.27	104.24	94.56

(For Current Prices see Page 9)

Chemicals

Bichromates—Consuming demand continued good for spot stocks and delivery against current contracts. Consumers continued to absorb liberal quantities against former orders. Prices were without change and firm for all grades.

Sodium Hydrosulfite—This market remained steady. Demand was fairly active, chiefly for prompt needs. Quotations were without change.

Sulfonated Oils—Business was reported routine for most varieties. Prices were well held at former levels.

Sizing Materials

Corn Dextrin—Consumers continued to absorb sizable lots for prompt delivery. Market remained firm at current quotations for all grades. Gum was quoted at $9.15 per 100 pounds, paper bags, carlots, New York delivery; canary, $8.89; dark $8.99 and white $8.73, same basis. Smaller quantities were 15c. per 100 pounds higher.

Corn Starch—Business continued in good volume for immediate and later requirements. Prices were unchanged and firm. Pearl was quoted at $7.13 per 100 pounds, paper bags, carlots, New York and powder, $7.25, same basis. Lesser quantities were 15c. 100 pounds more. Visible corn supply was lower, declining 207,000 bushels to 20,878,000 bushels for the week ending September 30, compared with 14,537,000 bushels for the same time last year, it was reported by the Chicago Board of Trade.

Egg Albumin—Trading was reported fairly active. Market remained steady, for all grades. Flake was maintained at $1.80 to $1.85 per pound, and powder, $1.84 to $1.89 per pound, according to quantity. Technical moved in fair volume and was held at 70c. to 85c. per pound, spot according to quantity and seller.

Liquid egg production during August for immediate consumption, freezing and drying totaled 16,112,000 pounds compared with 12,336,000 pounds in August last year and the 1949-53 average of 18,578,000 pounds. The quantities used for immediate consumption, drying and freezing were all larger than a year earlier.

Dried egg (egg solids) production during August amounted to 1,319,000 pounds compared with 1,215,000 pounds during August last year and the average of 2,553,000 pounds. August production consisted of 40,000 pounds of dried whole egg, 880,000 pounds of dried albumen and 393,000 pounds of dried yolk. Production during August last year consisted of 35,000 pounds of dried whole egg, 685,000 pounds of dried albumen and 495,000 pounds of dried yolk. Frozen egg production during August totaled 10,012,000 pounds, against 8,107,000 pounds in August last year and the 1949-53 average of 10,201,000 pounds. Frozen egg stocks decreased 15,000,000 pounds compared with a decrease of 20,000,000 pounds during August last year and the average August decrease of 18,000,000 pounds.

Egg Yolk—Consuming demand was fairly active for immediate needs. Market was steady and quotably unchanged. Prices ranged from $1.09 to $1.13 per pound, spot according to seller and quantity. Yolk output in August was indicated at 393,000 pounds, against 495,000 pounds, August last year.

Potato Starch—Trading was reported at 5.65c. per pound, carlots, f.o.b. mills, Maine for nearby delivery. Consumers continued to show good inquiry, but limited purchases to actual needs. Market remained unsteady in lieu of forthcoming heavy production. Producers are endeavoring to stabilize the market by seeking financial assistance in order to place excess production in storage. Idaho producers have resumed offerings and were holding at 6¾c. per pound, carlots, f.o.b. mills. Demand for spot delivery was quite active, with sales ranging from 8c. to 8½c. per pound, exwarehouse, depending upon quantity.

Sago Flour—Higher cost of replacements from primary sources has created a firmer tone in the local market and stocks on spot were fractionally higher. Offers for prompt shipment was light and firmer around 6¼c. per pound, carlots, exdock. Spot stocks were raised ¼c. per pound. Raw was quoted at 6¾c. to 7c. per pound and refined, 8½c. to 8¾c., exwarehouse, depending upon quantity.

Tapioca Flour—Good consuming demand was noted for spot delivery and prompt shipment from Brazil. Shipments were generally quoted at 6¼c. per pound, carlots, exdock, with some business reported at slightly less. On spot, the market was unchanged and steady at 7¾c. to 8¼c. per pound, exwarehouse, according to quantity.

Tanning Materials

Cutch—Offers for shipment remained unchanged and steady at 8½c. per pound, exdock. Buying interest was fairly active.

Mangrove Bark—Trading continued restricted to an occasional lot for prompt shipment. Primary markets were steady. All grades were unchanged. African bark was offered at $69 to $71 per ton, ex dock. Colombian bark was unchanged at $58 per ton, ex dock, and Ecuadorian $55 per ton, same basis, prompt shipment.

Myrobalans—This market was quiet, but steady. Shipments were maintained at former levels. Assorted JI's were quoted at $58 per ton, ex dock, for prompt shipment; crushed, $82, and Bombay, $55, same basis. Extract was nominal at 10c. to 10¼c. per pound, ex-dock, plus duty.

Quebracho Extract—Offers for shipment were well held at prevailing levels. Buying interest was fairly active, with actual trading reported for prompt shipment. Solid ordinary guaranteed 63 percent tannin was offered at 11 21/32c. and clarified 64 percent was 12 23/64c. per pound, exdock, plus duty.

Valonia—Trading was reported slow, but shipments were well held at unchanged quotations. Cups were quoted at $50 per ton, exdock, prompt shipment; beards at $69 per ton. Extract was available at 7¾c. per pound, exdock, plus duty.

Wattle—Consuming inquiry was reported improved, though actual trading was limited to prompt shipment. Primary market was unchanged and steady. Fair average bark was quoted at $99 per ton, exdock, and merchantable, $96, same basis, prompt shipment. East African extract was unchanged at 9¾c. per pound, and South African, 10c., exdock, plus duty.

For Late Market Developments, See Page 4

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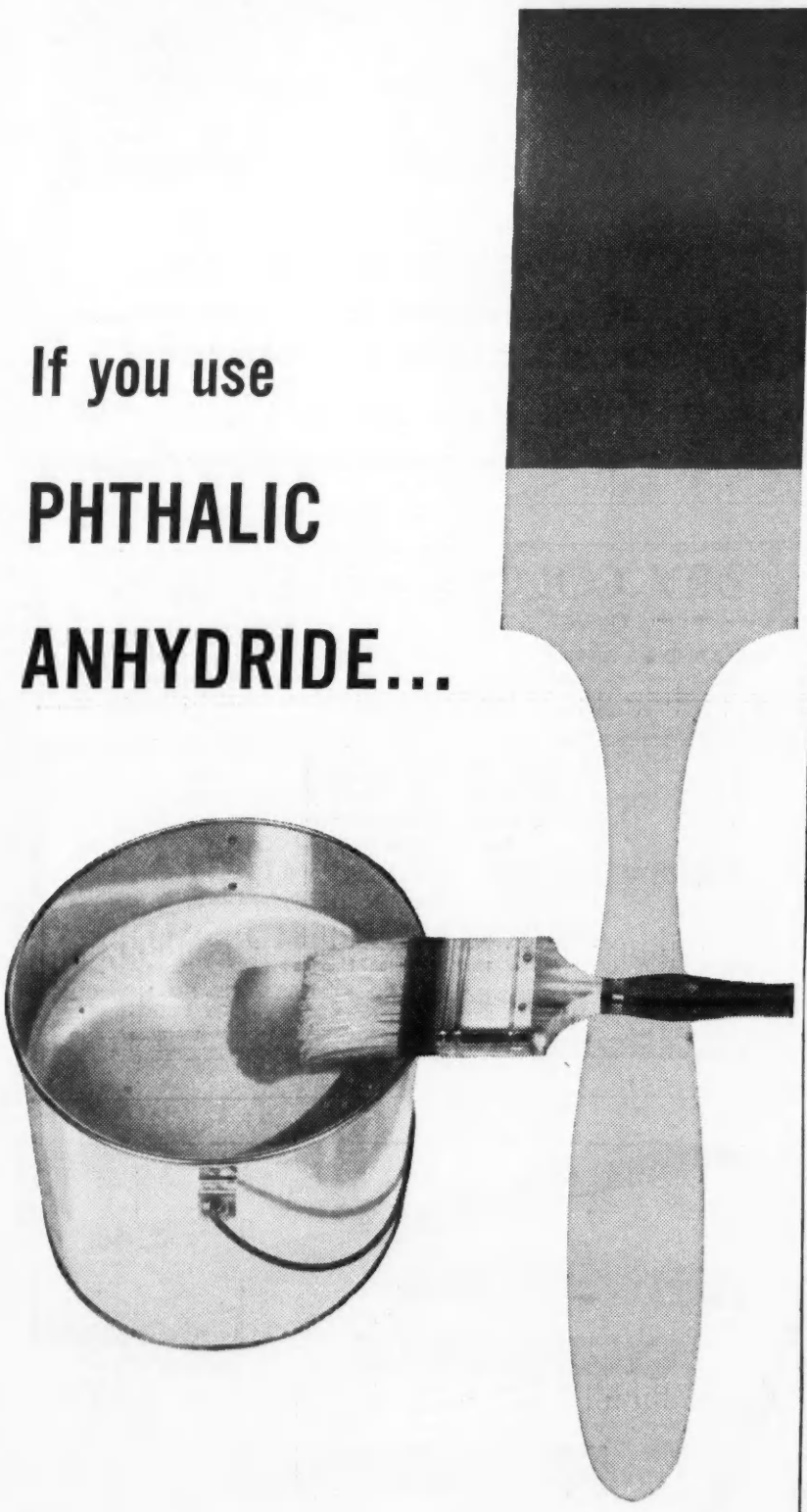

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Coal Chemicals

Contract prices on natural and synthetic grades of phenol were advanced 1 cent per pound effective October 1. Coaltar pitch prices were also advanced on the same date. An increase of $2 per ton was announced for the grade listed in OPD.

Coaltar products were in very good market condition and in line with overall business prospects for the remainder of the year. Light oils held firm in most areas as production kept in line with the high steel operational rates now in effect. Styrene manufacturers were selling good amounts to synthetic rubber producers, thus maintaining good inquiry into benzol production. Some reports that toluol was not quite as strong as it had been in past months were being circulated, but the market was still fairly steady. Xylol production was also at high levels, but maintained a good balance between supply and demand.

Continued demand from many outlets highlighted the tar acid products market. Cresol and cresylic acid sales approached new highs. Naphthalene was still very tight as major automobile producers maintained demand for protective coatings, plastics, and other accessories from individual producers. Phenol prices on the increase have made buying in the past few weeks more active. Some producers stated they were behind on shipments. Pyridine remained the one product which was not showing steady sales strength. Intermediates, led by phthalic anhydride, were moving well into consuming outlets in good quantities.

Steel production during the week ending October 9 was scheduled to be at 96.5 percent of theoretical capacity, or an index rating of 145.0, according to the American Iron and Steel Institute. This was equivalent to 2,330,000 tons of ingots and castings, compared with actual output of 2,341,000 tons one week ago, 2,264,000 tons one month ago, and 1,692,000 tons one year ago.

Basic Products

Benzol — Styrene manufacturers continued to maintain the high demand rates which have been prevalent throughout most of the year. Producers were practically assured of a good last quarter in sales. With the automobile industry keeping production levels at a rate near that reached with last year's model, benzol suppliers could see no lag in demand in the near future. Synthetic rubber producers have kept production at high levels to meet demand from automobiles and other allied manufacturers.

New developments in the manufacture of plastics were still being discovered, thus spreading the use of benzol and other light oils to new fields at frequent intervals. Steady demand was also being felt from synthetic phenol and dyestuffs producers. Insecticides were still enjoying off-season surges in buying, especially in the west and south. Benzol was being diverted into the production of many organic chemicals. Steel production still climbed to near capacity quotas and kept benzol inventories at fairly high levels.

Cresols—Most of the market depicted the strong demand status of many grades of cresol. Consumers were buying large quantities of this material for the production of cresylic resins. Wire enamels manufacturers were reported buying good amounts of cresol as the sale of wire to housing and technical developments, such as television cables, increased steadily. The tight market outlook is expected to continue for some time to come, sources indicated. Prices were steady at former levels.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending October 9, was as follows:—

Ammonia liquid, NH_3	lbs.	1,088,773
Ammonium sulfate	lbs.	39,351,367
Benzol	gals.	3,764,044
Coaltar	gals.	17,264,829
Creosote oil	gals.	964,342
Naphthalene, crude	lbs.	2,659,717
Pyridine, refined	lbs.	27,997
Toluol	gals.	740,367
Xylol	gals.	197,335

Price Trends

Advanced

Phenol, nat. & USP, 1c. per lb.
Pitch, $2 per ton.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
114.79	114.77	114.74	114.56

(*For Current Prices see Page 9*)

Cresylic Acid—The market continued to be fairly tight. Sources indicated that sales were very good in most areas. Production was approaching peak capacity in many plants, trade sources reported. Many suppliers had to keep their inventory below ten days in order to meet buying inquiry from old outlets. There was some inquiry from various new consumers also.

Manufacturers of disinfectants, flotation outlets, and aircraft engine cleaners provided good call for cresylic acid. Some grades were considered tighter than others, but, on the whole, all were moving at a good pace. A factor in the short situation was the absence of enough distillation time to handle the overall crude available to run. Prices remained steady at previous quotations.

Naphthalene — Crude material was available to maintain production rates, but consumers' demand was such to reduce any possible surplus to a negligible status. Production of phthalic anhydride continued to place plenty of demand on the naphthalene stocks, wherever they existed. The automobile industry continues at top production levels, thus making suppliers furnish as much phthalic and other raw materials to protective coatings makers, plastics producers, and other related manufacturers supplying materials to the automobile industry.

Because of a difference in contract prices on crude 78° naphthalene in bags, carlots, and less than carlots quantities, it was necessary to insert a range in price. The carlot price now ranges from 7½c. to 8c. per pound and the less than carlots price shows a range of 7¾c. to 8¼c. per pound. The listing for 74° crude domestic naphthalene was not correct in the last issue. The correct price is 6¼c. per pound.

Imported naphthalene was still described as very tight. There were reports that any material available was being offered at prices above the nominal 7c. price recorded in OPD. Some suppliers were reported to be selling material at prices ranging from 7½c. to 8½c. per pound. There has been considerable increase in naphthalene use within the producing countries, thus making less and less naphthalene available. Just when there will be a firming of this market was not definitely known.

Phenol — On October 1 the 1c. per pound price increase which was first announced July 1 went into effect. The following new prices have been listed in OPD prices current. Phenol, 90-92% (cresol 8-10%), non-returnable drums, carlots, freight allowed, east of the Rockies, 16¾c. per pound. Less than carlots quantities, same basis, 17½c. per pound and in tankcars, same basis, 15c. per pound.

The 82-84% (cresol 16-18%), non-returnable drums, carlots, freight allowed, east of the Rockies, 16¼c. per pound. Less than carlots quantities, same basis, 17c. per pound, and in tankcars, same basis, 14¼c. per pound. Material 39° or above, tar distilled, non-returnable drums, carlots, same basis, 17¾c. per pound, less than carlots, same basis, 18½c. per pound, and in tankcars, same basis, 15½c. per pound. Synthetic USP phenol, drums, carlots, freight allowed, 18¾c. per pound. In 1,000 pound lots or more, same basis, 19½c. per pound and less than 1,000 pound lots, same basis, 20½c. per pound, and in tankcars, same basis, 17c. per pound.

Pyridine—Material was still available in good quantities, and consumers indicated a lack of buying interest. The market could be described as soft in most areas, trade sources noted. The drive to recover markets lost during the Korean war shortage was moving slowly. At that time prices were considerably higher. Producers were of the opinion that new uses would have to be found to relieve the present surplus in production capacity. Prices were not changed.

Toluol—Although production increases resulting from record steel operations

For Late Market Developments, See Page 4

made plenty of toluol available, demand was at high enough rate to make the market steady. There was some indication a lessening in demand, but this has been felt in few areas. Military buying was said to be slightly better in the past few months. Prices were generally stable, however, and trade sources looked for no particular change in the market.

Xylol—Consumer requirements and production were considered fairly well balanced. Strong demand from alkyd resins provided good activity for xylol. Supplies were said to be adequate to take care of present buying. The high coking levels have made xylol producers keep production at very high rates. The 3- and 5-degree material has been moving quite readily into pharmaceutical and dyestuff outlets. No price changes were listed.

Intermediates

Aniline — Regular consuming outlets were keeping a steady demand for this material. The intermediate was said to be doing very well in most areas. The rubber industry provided good activity, as did the textile dyestuff intermediate use. There was some movement to hydroquinone, sources related. Production was adequate to meet any demand. No changes were noted in current price listings.

Benzoic Acid—Material was in fair demand in many areas, according to industry sources. The expected rise in demand from the textile intermediate producers, as many textile plants moved into full swing in preparation for the spring clothing season, helped the market considerably. Production of benzoic acid was said to be at fairly high rates. No price changes were noted as of last week.

6-tert-Butyl-m-cresol—Demand was said to be fairly strong. This market was somewhat of a specialty, according to trade sources. The good condition of this material indicates the general picture for cresols. Prices have been firm since the increase of July 1. The final quarter sales are expected to be very good, it was reported last week.

Di-tert-butyl-p-cresol — As p-cresol isomers maintained a steady supply and demand status, DBPC also moved well. Demand was reported to fairly stable, and production maintained a good pace. Developments in usage as an anti-oxidant and gasoline additive have maintained active buying interest. Prices were steady and unchanged.

Dodecylbenzene—Producers stated that demand was still holding its own, and that they were meeting all inquiry with comparative ease. The price reduction which went into effect July 1 was absorbed without difficulty and the market, as a whole, was considered in good condition.

Hydroquinone—Demand is holding at very high levels, it was reported. Material was moved well in all quarters. The rubber industry was cited as the chief buyer of this intermediate. The bright picture is expected to continue for some time. Price schedules have not changed in recent weeks.

Maleic Anhydride—The market was diversified enough to meet much of the material producers were putting out. On the whole, it was said to be in good condition. Sales to manufacturers of polyesters was on the upswing, while production held to a steady rate. Prices were unchanged.

b-Naphthol—The rubber industry maintained good buying interest during the last few months. Much of the material is also diverted into dyestuff intermediate use. Suppliers noted that inquiry was well maintained. Consumers were getting the material they needed despite a strong pace throughout the market. Established price levels have been firm for some time.

Phthalic Anhydride — Commitments were being met with considerable production output above normal. Consumers were said to be getting the phthalic they need after slight delays in some quarters and immediately in others. Material was not available for stockpiling at all, it was reported. Demand was held up surprisingly well during the past year. Much of the material is being diverted indirectly into the automobile industry and allied manufacturers. Producers were said to be able to get enough raw material to meet requirements, but not enough to build up any reserves. Prices were still firm.

Quinoline—Marketing conditions in this material were considered stable last week. The sales picture was said to be improving slightly, as other tar acid bases remained in fairly good position. Production figures were ample to meet present demand along with any new interest which

—*Continued on page 80*

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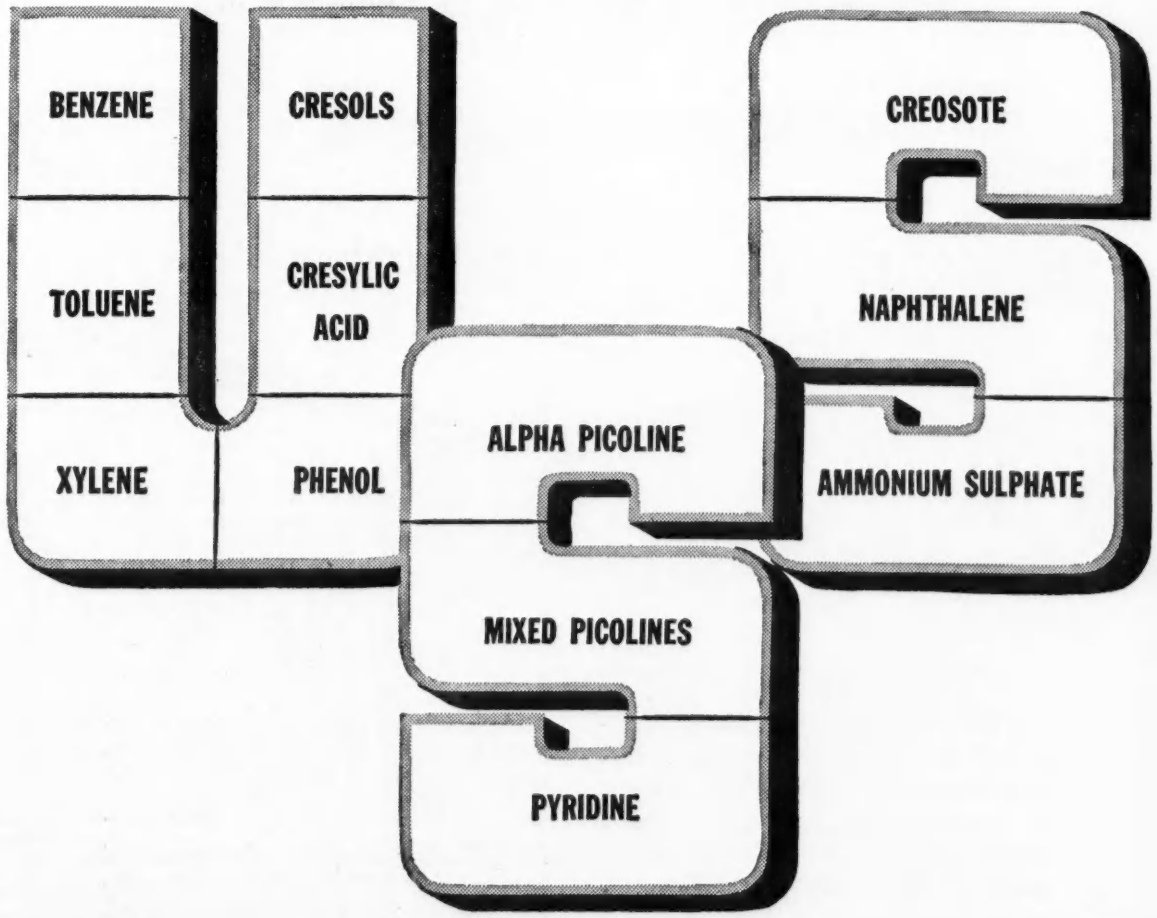

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Drugs, Fine Chemicals, Botanicals

The most recent advance in the price of silver bullion pushed that material to its highest price level in 35 years. Last week saw silver salt prices follow suit. The major salts, the nitrate and the cyanide, were both advanced as were some minor salts. Silver nitrate was advanced ⅞ cent per ounce while silver cyanide went up 1⅛ cents per ounce. 1-Phenyl-3-methyl pyrazolone-5 was advanced 10 cents per pound, effective October 1.

Reserpine alkaloid was reduced $2 per gram last week in the third price change in approximately a year's time. The reduction was the latest in a series of declines in this drug and was indicative of the lowering in manufacturing costs which has resulted principally from reductions in raw material costs and secondarily from economies achieved through increased production. The use of reserpine in the treatment of mental diseases has been enjoying a phenomenal boom and has not yet reached its peak, according to informed trade sources. The second most important use for this alkaloid is in the treatment of high blood pressure which has been steadily gaining in this application.

While manufacturers in the drugs and fine chemicals market expected to enjoy a good fourth quarter, there continued to be some soft spots, pricewise, which have been attributed to excessive production. This applied to the antibiotics in general and to penicillin and streptomycin, in particular. Production of the latter compounds has surpassed consumption in the past year, although this has been more the result of increased production rather than any decline in usage. Consumption of these compounds this year was expected to be higher tonnagewise, than in 1954 although sales totals may be lower due to falling prices which have prevailed during most of the year.

Acetanilide—Demand for USP acetanilide continued at a routine pace. Consumption of this material is confined to a few major uses and production schedules are generally planned to keep supplies adequate to accommodate manufacturers' requirements.

Acetylsalicylic Acid—Inquiry for acetylsalicylic acid (aspirin) was reported to be running at seasonal levels. Aspirin is consumed in tremendous quantities in the treatment of the common cold both as such and in combination with other ingredients. The price picture was very stable as it has been for some time. Supplies were adequate to meet trade requirements and expected to continue in the immediate future.

Production of aspirin during July as reported by the United States Tariff Commission aggregated 1,099,040 pounds compared to 1,406,465 pounds turned out in June, 1955.

Ascorbic Acid — Demand for ascorbic acid was reported to be running at a good rate. Supplies were adequate to meet trade requirements and production capacity was estimated to be sufficiently adequate to accommodate any reasonable increases in inquiry. Prices were steady and although there was said to be some imported material being offered at prices below levels of domestic manufacturers, there has been less competition of late with domestic makers.

Production of ascorbic acid (vitamin C) and salts in July amounted to 180,033 pounds in July compared to 195,792 pounds turned out in June, according to the Tariff Commision.

Codliver Oil—Inquiry for codliver oil was reported to be seasonally active. Aside from its use in animal feeds where it serves both as a source of vitamins A and D and as a food source, the USP grade is used in substantial quanties during the cold weather months. Codliver oil is still favored by some consumers as a source of vitamins A and D although, of course, the synthetic vitamins have taken over the bulk of this business. Supplies were currently ample to meet inquiry.

A recent report from a California tuberculosis sanitarium indicates that there may be a factor favorable to the healing of tuberculosis in the crude concentrate of vitamin A from cod liver oil. For this experiment, a group of patients who appeared to be in poor nutritional state when they contracted the disease, on account of low concentrations of vitamins A and C in their blood, were chosen. They were given no modern miracle drugs, but all were given the traditional treatment of bed rest, and all were given a nourishing basal diet. Some were given synthetic vitamin A in tablet form, some were given cod liver oil containing vitamin A, and a third group received no additional vitamins. All those who received the cod liver oil got better and their TB scars showed signs of healing. Those receiving the synthetic vitamin A did no better than those who had only the vitamins from their basic diet. Results have been reportedly so encouraging that further work is already underway to find the active principle responsible for the effectiveness of crude cod liver oil.

Ethyl Ether—Demand for the USP grade of ethyl ether continued routine. Supplies were adequate and prices unchanged.

Production of USP and technical grades of ethyl ether combined amounted to 5,402,907 pounds in July compared to 6,508,429 pounds turned out in June.

Mercurials—The market in mercury metal has been quite firm and on the rise. This has resulted in a strengthening trend in mercurial prices. Inventories of mercury held by manufacturers of the salts were believed small and there was a possibility that mercurial prices might be raised to compensate for the higher raw material costs.

Overall consumption of mercurials has declined in recent years both as a result of some displacement by other compounds but also as a result of the higher prices at which these compounds have been quoted since the metal started its long price climb some years ago. Inquiry for the mercury salts was currently quiet with supplies ample to accommodate trade needs.

Niacin — The spot market was steady last week with inquiry routine and supplies adequate. Prices were unchanged and holding at a steady level.

Penicillin—The spot market showed some seasonal increase in demand according to some quarters, but on the whole, the price pattern continued weak. Production of penicillin has been cut back in recent months to reduce the size of the surplus of this antibiotic. Competition in the past year has been intense with the result that prices have declined to a new low.

Phenylmethylpyrazolone — Prices were advanced 10c. per pound on 1-phenyl-3-methyl pyrazolone-5 effective October 1. The new price schedule was as follows, in 250 pound drums, $1.80 per pound, with smaller quantities listed at $2.10.

Pyridoxine—Inquiry for vitamin B-6 (pyridoxine) was said to be routine while prices held unchanged. Supplies were ample to meet trade needs.

The Tariff Commission reported that production of pyridoxine aggregated 2,200 pounds during July compared to 4,045 pounds turned out in June, 1955.

Reserpine—Quotations were cut $2 to $3 per gram last week in the third price change in less than a year. At the time when bulk reserpine was first offered a year ago, the market price in any quantity was a flat $25 per gram. This has come successively to $12 per gram and now to a low of $9 for 1 kilo lots or more. To be realistic, however, the bulk of today's business is done in lots of 500 grams or less for which the price is $10 per gram. Sales made in the 500-1000 gram range were pegged at $9.50 per gram.

The 60 percent decline in price from the original quotation has been achieved through the lowering of raw material costs. Originally reserpine was derived only from rauwolfia serpentina root, a species which was found exclusievly in a small area in India. With demand booming the market price on the root advanced to exhorbitantly high levels while the supply situation was very poor.

In the past year, however, drugs manufacturers have been extracting reserpine from a number of species of rauwolfia

For Late Market Developments, See Page 4

Price Trends

Advanced

1-Phenyl-3-methyl pyrazolone-5, 10c. per lb.
Silver cyanide, 1⅛c. per oz.
Nitrate, ⅞c. per oz.

Reduced

Reserpine alkaloid, $2 per gram.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
66.42	66.45	66.49	67.79

(For Current Prices see Page 9)

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and prices have subsequently declined appreciably. Informed sources in the trade predict an ever growing consumption of reserpine which, in addition to the marvelous results achieved through its use in the treatment of the mentally ill has also been promoted as a potent drug in the treatment of high blood pressure.

Silver Salts—The silver salts were advanced last week following a further rise in the price of silver bullion. It was noted that the bullion price had hit its highest level since 1920.

Silver cyanide was advanced 1⅛c. per ounce while the nitrate salt went up ⅞c. per ounce. The new schedule on the former was as follows in 100 ounce bottles: 2,500 ounce lots, 82⅜c.; 1,000 ounce lots, 82¾c.; 500 ounce lots, 82⅞c. and single 100 ounce bottles at 83⅛c. per ounce.

Silver nitrate was quoted as follows in 250 ounce bottles; 2,500 ounce lots, 58⅝c.; 1,000 ounce lots, 60⅛c.; 500 ounce lots, 60⅜c., and single 250 ounce bottles, 60⅞c. per ounce.

Streptomycin—Inquiry continues fair. Supplies were more than adequate to cover trade needs and competition among producers remains heavy. There has been an increasing growth in the use of streptomycin in agriculture. Good results in the control of certain plant diseases have been reported and research was being actively pushed along this line.

A major factor tending to hold back progress in the use of this antibiotic in the prevention and mitigation of plant diseases has been its cost. It was felt that if manufacturing costs of streptomycin could be brought down that its future use in agriculture could be stepped up.

Production of streptomycin during July aggregated 4,410,349 grams according to the United States Tariff Commission compared to 4,820,153 grams in June. Production of dihydrostreptomycin amounted to 1,166,456 grams in July compared to 14,289,610 grams in June.

Sulfa Drugs—Overall inquiry was reported to be fair with consumption on the rise in some directions. Supplies were adequate to meet consumer needs and expected to continue in the immediate future. Priceewise there were no changes in the market last week.

Production of sulfa drugs (bulk material only) amounted to 153,161 pounds in July, 1955, compared to 189,431 pounds in June, according to the most recent report issued by the Tariff Commission.

Thiamin—Production of thiamin derivatives (B-1) totaled 14,025 pounds in July compared to 19,027 pounds reported for June by the Tariff Commission.

Inquiry for thiamin was reported to be running along at a good rate. Consumption of thiamin as a vitamin B supplement in cereals and grain products constitutes a major outlet, it was said, in addition to its use in multi-vitamin preparations in the pharmaceutical line. Prices were steady with imports posing less of a threat to the domestic market of late.

Botanicals

The spot market continued steady last week. Takings by cough and cold remedies manufacturers were seasonally heavy and while the supply position of most items was good, there were some tight spots in the overall picture. The outlook for this quarter was for the usual volume of business activity.

Witch hazel leaves were noted to have firmed to some extent in view of the substantial demand for this botanical and the fact that collectors had failed to gather as large a crop as anticipated earlier in the season. Mandrake root was also reported to have strengthened, pricewise, in the spot market, and the possibility that higher root costs would force an advance in podophyllum resin was considered likely.

Arnica Flowers—There were virtually no stocks of the true montana variety to be found in the spot market. Offerings from origin have been reported to be extremely limited while the spot price was nominally quoted around $3 per pound.

Cocillana Bark—The spot market was firm with consumers reported to be buying at a steady rate in view of the seasonal production of cough remedies.

Grindelia Robusta Herb—The spot market was easier with a decline of 6c. noted. The current quotation was 32c. per pound.

Lobelia Herb—Spot prices have advanced substantially and threathen to go even higher. Some sources were quoting as high as $1.25 per pound. Collection of this herb during the past year was small and stocks have grown quite tight, it was said.

Power Reactor Proposals Being Sought by the AEC

Lewis L. Strauss, charman of the Atomic Eenrgy Commission, has announced that the commission is inviting proposals for the development, design, construction, and operation in the United States, its territories and possessions and the Canal Zone, of power reactors in a wide range of capacities, to demonstrate the practical value of such units for commercial use.

The invitation calls for proposals especially directed to unclear power plants with the following capacities:—5,000 to 10,000; 10,000 to 20,000; and 20,000 to 40,000 kilowatts of electricity. The closing date for receipt of proposals is February 1, 1956.

The invitation is the second issued under the AEC's power demonstration reactor program which was established in January to open the way for American industry and others, to develop, fabricate, construct, and operate experimental nuclear power reactors. The aim of the program is to bring new resources into the development of engineering information on the performance of nuclear power reactors and to advance the time when unclear power becomes economically feasible.

The invitation is extended to individual organizations or to groups of organizations representing private or publicly-owned utilities, equipment manufacturers, or others. In making the announcement, Mr. Strauss pointed out that development of small competitive nuclear power plants will not only benefit domestic users in certain areas, but will help meet the requirements of foreign countries as well.

The commission will evaluate the proposals on a competitive basis in and between the different power ranges, within the limits of funds and materials available. The commission may accept one or several proposals, or it may find that none is acceptable. The commission's first request for proposals last January resulted in submission of four plans for reactor plants, the combined electrical capacity of which would be 455,000 kilowatts.

Winthrop-Stearns V.P., Dr. A. E. Sherndal, Retires

Dr. A. E. Sherndal, one of the country's most eminent chemists, has retired at the age of seventy as vice-president and plant manager of Winthrop-Stearns Inc., Rensselaer, N. Y. Dr. Sherndal has been a chemist for forty-eight years, the last thirty-eight of which were spent in association with Winthrop-Stearns and its parent organization, Sterling Drug Inc.

As a chemist, Dr. Sherndal has numerous significant achievements to his credit. One of his major contributions occured during World War I when, after the entry of the United States, he joined H. A. Metz Laboratories and helped crack the secrets of the manufacture of the drug salvarsan, which no longer could be obtained from Germany.

Dr. Sherndal also played a prominent part in the synthesis of novocain. More recently he aided in developing the antimalarial drug, atabrine. For this latter accomplishment, St. Lawrence University awarded Dr. Sherndal an honorary degree of Doctor of Science in 1943.

Oronite Elects Two Officers

Oronite Chemical Company, San Francisco, has elected Allen W. Horton, jr., secretary-treasurer and Walter C. Kaul comptroller. Mr. Horton, who succeeds the late B. W. Anthony as Oronite's secretary-treasurer, was formerly chief analyst in the comptroller's department for Standard Oil Company of California. Mr. Kaul was previously assistant treasurer for Oronite, having shifted there from California Standard in 1945.

FTC Moves To Bring End

—*Continued from page 3*

gists' Supply in turn billed the buyer allowing a 15 percent discount, retaining the remaining 5 percent for its work.

Once a year, the complaint alleges, Druggists' Supply deducts its expenses from the income received from these sources and distributes the rest to its stockholders on the basis of their individual purchases. From 1950 to 1954, for example, $710,000 was distributed under this plan, the complaint states. This proceeding considers as respondents the corporation and all of its approximately 104 stockholder members.

Druggists Supply Corporation said it wanted to study the FTC charges before issuing a statement. It did say, however, that it believed its practices were not in violation of the Robinson-Patman act. It said further that it believed the FTC was in error in saying that the corporation acted as a broker or purchasing agent for members.

The corporation pointed out that its stockholders recently voted to dissolve the company as of December 31. This, it said, was in accordance with a plan developed during the past four years, which contemplates that most of the functions of the company will be performed by a new non-profit membership corporation yet to be organized.

Pesticide Residues Get Approval From the FDA

The Food and Drug Administration last week announced approval of a residue tolerance of one part per million for the chemical pesticide 3-(3,4-dichlorophenyl) 1,1-dimethylurea when used on cottonseed, pineapple, and sugarcane. Persons adversely affected by the order may file objections with the hearing clerk, Department of Health, Education and Welfare, before October 15.

Approval was also given to a tolerance of five parts per million for residues of "Chlorobenzilate' (ethyl 4,4'-dichlorobenzilate) on apples, cantaloups, lemons, oranges and pears.

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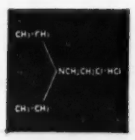

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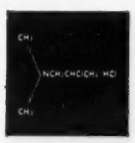

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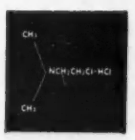

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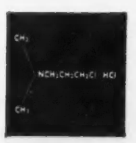

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Warner-Chilcott Labs Names Enes Market Research Mgr.

The appointment of William Enes as manager of market research for Warner-Chilcott Laboratories has been announced by Edmund R. Beckwith, jr., vice-president in charge of the ethical drug division of the Warner-Lambert Pharmaceutical Company.

Mr. Enes goes to Warner-Chilcott from Barrington Associates, management consultants. Previously Mr. Enes served in executive positions in market research with American Home Foods, and Zonite Corporation. Mr. Enes' first project will be to test market a number of new therapeutic agents developed in the firm's research laboratories.

McKesson Makes Morson Aid to Laboratories Head

John M. Morson has been appointed to the newly created position of assistant to Wilbur E. Dewell, vice-president in charge of the McKesson Laboratories, manufacturing division of McKesson & Robbins, Inc., New York.

Mr. Morson, who has been with the McKesson organization since 1946 was formerly assistant to H. C. Nolen, executive vice-president in charge of drug merchandising. Mr. Morson has served as operations manager of the company's Jacksonville (Fla.) division, southeast district operations manager and operations representative in McKesson's New York home office.

HIF Elects Hiebert, McKeen

Health Information Foundation has elected Dr. J. Mark Hiebert, president of Sterling Drug, Inc., New York, a foundation vice-president and a member of its executive committee. John E. McKeen, president of Chas. Pfizer & Co., Brooklyn, N. Y., has been elected a member of the foundation's operating and executive committees. Dr. Hiebert is a new addition to the board. Mr. McKeen has been an HIF board member since the founding of the organization in 1950.

Rowell Labs Is Expanding

Rowell Laboratories, Inc., Baudette, Minn., has begun an expansion project at its home plant. The construction will result in an addition story, and will provide the company's research department with new, larger quarters.

Phila. Drug Exchange Golfs Oct. 11

The Philadelphia Drug Exchange will hold its fall golf outing October 11 at the Manufacturers' Golf and Country Club, Oreland, Pa.

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Colgate-Palmolive Planning New Research Laboratories

Colgate-Palmolive Company, Jersey City, N. J., has announced that it is planning to erect new central research laboratories in the near future. The company has obtained an option to purchase a tract of thirty-five acres in Bloomfield, N. J., which would be suitable for this purpose.

The laboratory would house between 350 and 400 persons and have more than 200,000 square feet of floor area devoted to various research activities. The research center would bring together most of the basic and applied research functions of the company, with its development activities and newly-completed pilot plant remaining at the plant site in Jersey City.

AEC Calls for Proposals To Build Power Reactors

The Atomic Energy Commission has announced that it is inviting proposals for the development, design, construction, and operation in the United States, its territories and possessions and the Canal Zone, of power reactors in a wide range of capacities, to demonstrate the practical value of such units for commercial use.

The invitation calls for proposals especially directed to nuclear power plants with the following capacities:—5,000 to 10,000, 10,000 to 20,000, and 20,000 to 40,000 kilowatts of electricity. The closing date for receipt of proposals is February 1, 1956. The invitation is extended to individual organizations or to groups of organizations representing private or publicly-owned utilities, equipment manufacturers, or others.

Sterling Drug Appoints

John C. Ward has been appointed director of industrial relations of Sterling Drug, Inc., New York. Mr. Ward will administer the industrial relations program of the company's divisions and subsidiaries in the United States and Canada, conduct contract negotiations and act in a consultative capacity to personnel managers of the company's plants in North America.

Bristol Labs Adds Representatives

Three sales representatives at Bristol Laboratories, Inc., Syracuse, N. Y., have been promoted to be district managers, according to Richard A. Anderson, vice-president and director of marketing. They are George Burns, with headquarters in Larchmont, N. Y.; William McKinney, with headquarters in Dallas, Tex., and Philip J. Hahn, with headquarters in New York city.

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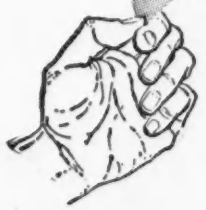
KELCO ALGINATES



As little as 0.1%, to as much as 5.0%, of Kelco alginate in your formula produces a clear, tough and flexible film. Resistant to greases, oils, fats, waxes, and organic solvents, Kelco alginate films are compatible with the common hygroscopic plasticizers such as glycerine and sorbitol, and have good adherent qualities.

Water resistant films are obtained by including urea-formaldehyde type resins in your formulations which insolubilize the films on heating. Alginate films may be made water resistant, also, by treating film with solution of alkaline earth or heavy metal salt such as zinc chloride or zirconium oxychloride.

The unique film forming abilities of Kelco alginate are finding wide usage in such diverse products as:

	Product	% of Total	Effect
KELCO	Paper sizing	0.2 — 3.5%	Improves printability of flat to full gloss ink. Controls ink and wax penetration. Increases Mullen test.
	Textile finishing	0.1 — 1.0%	Sizing on finished fabric for flexibility, stiffening, gloss, easy washout.
	Lotions	0.5 — 3.0%	Non-sticky film formation. Give body, smoothness, spread, uniformity.
	Bubble solution	0.3 — 1.0%	Makes stronger, longer lasting bubble. Gives body to solution for more bubble formation.

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KELCO REFINED ALGIN PRODUCTS

Imports at United States Ports

New York

ADONIS VERNALIS—5 bls, S B Penick & Co, Rijeka
SULFATE—930 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM HYDROXIDE—12 dms, Hudson Shippool
SULFATE—1 dm, Fielding Chemical Co, Bremen
AGAR—10 dms, Heemsoth Kerner, Barcelona
ping Co, Liverpool
AMBER—5 dms, Marine Midland Trust Co, Puetro Cortez
p-AMINOBENZOIC ACID—2 dms, Tuteur Bio-Chemicals, Liverpool
AMMONIUM BICARBONATE—100 dms, Chemical Mfg Co, London
BIFLUORIDE—40 cks, Interstate Chemical Co, Bremen
CARBONATE—25 cs, Glasgow
AMYRIS OIL—4 dms, Ungerer & Co, Port Au Prince
ANILINE DYES—104 dms, Hensel Bruckmann & Lorbacher, Rotterdam
23 dms, C A Haynes, Hamburg
3 dms, C A Haynes, Rotterdam
20 dms, Hanover Bank, Rotterdam
2 dms, Verona Dyestuffs, Hamburg
98 dms, Hensel Bruckmann & Lorbacher, Hamburg
14 dms, Geigy Chemical Corp, Bremerhaven
2 cans, Hensel Bruckmann & Lorbacher, Bremen
2 dms, Hensel Bruckmann & Lorbacher, Bremen
9 dms, Heemsoth Kerner, Liverpool
61 dms, Rotterdam
9 cans, Rotterdam
ANISE SEED—100 bgs, Chase Manhattan Bank, Malaga
106 bgs, Wm E Martin, Alicante
182 bgs, E E Bier, Alicante
100 bgs, Malaga
ANTIMONY—250 tons, National Lead Co, Bona
450 cs, C Tennant Sons & Co, Havre
15 cks, Rotterdam
OXYCHLORIDE—1 cs, Ameand Drug & Chemical Co, London
REGULUS—150 cs, Antwerp
SULFIDE—1 kg, Amend Drug & Chemical Co, London
ARABIC GUM—750 bgs, National City Bank, Port Sudan
510 bgs, Hanover Bank, Port Sudan
254 bgs, Chase Manhattan Bank, Port Sudan
ARNICA FLOWERS—169 bgs, Vera Cruz
ARROWROOT—4,437 bgs, Morningstar Nicol, Kingston
ASBESTOS FIBER—3,600 bgs, Johns Manville Corp, Beira
600 bgs, Ovimpex Inc, London
BARIUM CHLORIDE—220 bgs, Naftone Inc, Antwerp
SULFATE—5 dms, Lo Curto & Funk, Hamburg
BAY OIL—3 dms, George Lueders & Co, Dominica
1 dm, Magnus Mabee & Raynard, Dominica
2 dms, Royal Bank of Canada, Dominica
6 dms, Polak Frutal Works, Dominica
BEEF EXTRACT—80 cs, Tupman Thurlow, Brisbane
BEESWAX—61 pkgs, Koster Keunen, Lisbon
195 bgs, Alexandria
98 bgs, Tampico
62 bgs, Havana
59 bgs, Santiago
BENZOIN GUM—30 cs, Bangkok
BONE—531 bgs, Millgate Chemicals Ltd, Brisbane
BLACK—400 bgs, Transatlantic Animal By-Products Corp, Alexandria
500 bgs, Alexandria
CHAR—505 bgs, Lisbon
BRASS POWDER—9 dms, Heemsoth Kerner, Liverpool
BUTYROLACTONE—113 dms, Hensel Bruckmann & Lorbacher, Rotterdam
CALCIUM CARBONATE—600 bgs, H J Baker & Bro, Liverpool
CANANGA OIL—3 dms, Polak & Schwarz, Penang
CANDELILLA WAX—313 bgs, Tampico
CAPROLACTAM—17 cs, Industrial Rayon Corp, Hamburg
CARAWAY SEED—100 bgs, R J Spitz, Rotterdam
100 bgs, P H Petry, Rotterdam
250 bgs, A Gronowitz, Rotterdam
100 bgs, Meer Corp, Rotterdam
200 bgs, M J Golombeck, Rotterdam
400 bgs, Rotterdam
CARDAMOM SEED—40 cs, Wm E Martin, Puerto Barrios
CARNAUBA WAX—25 bgs, Wm Diehl & Co, Rio de Janeiro
22 bgs, Dura Commodities Corp, Rio de Janeiro
800 bgs, Rotterdam
CASEIN—3,400 bgs, Borden Co, Buenos Aires
3,500 bgs, Tupman Thurlow, Buenos Aires
1,000 bgs, Crawford Kish & Co, Buenos Aires
200 bgs, Chase Manhattan Bank, Buenos Aires
1,000 bgs, E J Lang, Buenos Aires
2,200 bgs, Irving Trust Co, Buenos Aires
100 bgs, Manufacturers Trust Co, Buenos Aires
200 bgs, Trust Co of North America, Buenos Aires
215 bgs, Frank Alexander Close & Co, London
20 bgs, Atlanta Products Corp, Gdynia
CASSIA—3,477 bls, Rotterdam
CASTOR BEANS—2,560 bgs, Baker Castor Oil Co, Manta
OIL—202 tons, Bunge Corp, Rotterdam
CEDRON SEED—1 bg, S B Penick & Co, Balboa
CELERY SEED—200 bgs, H Marmorek & Son, Marseille
17 bgs, Shippers Produce Corp, Marseille
CHESTNUT EXTRACT—313 bgs, American Dyewood Co, Marseille
1,000 bgs, Tanimex Corp, Rotterdam
CHLORAL HYDRATE—12 kgs, Leviant & Co, Antwerp
CHLORINATED RUBBER—260 bgs, C M C Chemicals Inc, Liverpool
CHLOROACETAMIDE—2 dms, Orlex Chemical & Dye Corp, Bremen
CHLOROACETIC ACID, MONO—400 dms, International Selling Corp, Marseille
CINNAMON QUILLS—75 bls, Mincing Trading Corp, Colombo
50 bls, Calvert Vavasseur, Colombo
40 bls, Fritzsche Bros, Colombo
CITRONELLA OIL—2 dms, Lo Curto & Funk, Puerto Cortes
CLAY—600 bgs, L A Salomon & Bros, Bremen
CLOVE—50 bls, Meer Corp, Zanzibar
COALTAR DYES—51 bgs, Lo Curto & Funk, Rotterdam
155 dms, Hensel Bruckmann & Lorbacher, Rotterdam
24 dms, C A Haynes, Rotterdam
2 cans, Rotterdam
COBALT CYANIDE—1 cs, Bios Lab, London
COD OIL—100 dms, Bremen
COPPER CYANIDE—267 dms, Chemical Manufacturing Co, Liverpool
CORIANDER OIL—2 cs, George Luelders & Co, Rijeka
7 cs, Flora Essential Oil Co, Antwerp
SEED—550 bgs, Gallo Grain Co, Casablanca
150 bgs, Knauf & Tesch Co, Casablanca
200 bgs, Garnac Grain Co, Casablanca
200 bgs, Levy & Levis Co, Casablanca
280 bgs, J C McCollough, Casablanca
CORN STARCH—560 bgs, Rotterdam
m-CRESOL—50 dms, Koppers Co, Glasgow
CRESYLIC ACID—300 dms, G F Smith Inc, Liverpool
285 dms, H A Gogarty, Liverpool
208 dms, M W Hardy, London
CUTTLEFISH BONE—70 cs, J E DeMacedo & Co, Cadiz
708 cs, E E Bier, Cadiz
152 cs, Malaga
54 cs, Colombo
DAMMAR GUM—210 bgs, O G Innes Corp, Singapore
35 bgs, Wm H Scheel, Singapore
DEXTRIN—200 bls, Rotterdam
DICHLOROANILIDE—1 kg, Bios Lab, Liverpool
EARTH COLORS—800 bgs, Naftone Inc, Bremen
FENUGREEK SEED—150 bgs, A A Herzog, Casablanca
FERRIC OXIDE—6 dms, R J Saunders & Co, Bremen
POTASSIUM TARTRATE—1 cs, Amend Drug & Chemical Co, London
SULFATE—110 dms, Liverpool
FISH LIVER OIL—5 dms, Bank of Tokyo, Yokohama
4 dms, Consumers Import Co, Yokohama
FUEL OIL—176,000 bbls, Esso Export Corp, Aruba
94,031 bbls, Asiatic Petroleum Corp, Curacao
93,013 bbls, Paragon Oil Co, Tampico
84,672 bbls, Shell Caribbean Petroleum Co, Punta Cardon
GALL OX—1 ck, Tupman Thurlow, Brisbane
2 dms, A Mayer, Brisbane
SHEEP—3 dms, Melbourne
7 dms, Sydney
GALLNUTS—90 bgs, Balfour Guthrie, Lattakia
111 bgs, Irving Trust Co, Lattakia
GELATIN—30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
GERANIUM OIL—3 dms, Antoine Chiris, Algiers
GERMANIUM OXIDE—68 cs, American Metal Co, Antwerp
GLANDS—1 cs, Commercial Banking Co of Sydney, Sydney
6 cs, Bankers Trust Co, Sydney
23 ctns, International Packers Ltd, Brisbane
GLUE—900 bgs, Corbett & Co, Marseille
100 bgs, Jung Forwarding Co, Liverpool
STOCK—114 bls, E J Lang, Liverpool
158 bls, Manhattan Paste & Glue Co, Havana
GLYCERINE—260 tons, Procter & Gamble Co, Manila
36 dms, Procter & Gamble Co, Manila
62 tons, L Pasternak & Co, Buenos Aires
91 dms, Alexandria
40 dms, Yokohama
GLYCOL MONOSOLICYLATE—22 dms, Whitehall Pharmacal Co, Liverpool
GRAPHITE—750 bgs, Asbury Graphite Mills, Colombo
250 bgs, Joseph Dixon Crucible Co, Colombo
250 bgs, C Pettinos, Colombo
30 dms, Subox Inc, Rotterdam
600 bgs, Asbury Graphite Mills, Bremen
GUAIACWOOD OIL—67 cs, Schimmel & Co, Buenos Aires
GYPSUM—19,533 tons, U S Gypsum Co, Hantsport
20,730 tons, National Gypsum Co, Halifax
HENNA LEAVES—130 bgs, S B Penick & Co, Alexandria
190 bls, Port Said
HYDROXYCYCLOHEXYL HYDROPEROXIDE — 30 cs, J E Fox, Rotterdam
ICHTHAMMOL—8 cs, Chas L Huisking & Co, Hamburg
IODINE, CRUDE—40 kgs, Chase Manhattan Bank, Yokohama
IPECAC ROOT—10 bgs, Meer Corp, Cristobal
10 bgs, Prentiss Drug & Chemical Co, Balboa
IRON BLUE—22 dms, Van Oppen & Co, Liverpool
JAPAN WAX—75 cs, Strohmeyer & Arpe, Kobe
KARAYA GUM— 246 bgs, Stein, Hall & Co, London
LACTOSE—220 dms, Chas L Huisking & Co, Liverpool
500 dms, Nestle Co, Liverpool
LAUREL LEAVES—32 bls, Louis Furth, Izmir
138 bls, Izmir
LAVENDER OIL—8 dms, Van Ameringen Haebler, Marseille
LEMONGRASS OIL—12 dms, Irving Trust Co, Cochin
6 dms, French American Banking Corp, Cochin
3 dms, Norda Essential Oil & Chemical Co, Port Au Prince
12 dms, Chase Manhattan Bank, Cochin
LIME OIL—2 dms, Felton Chemical Co, Port Au Prince
LITHOPONE—800 bgs, C J Osborn Co, Rotterdam
LIVER CONCENTRATE—20 cs, Bernarbo International Co, Buenos Aires
MEAL—655 bgs, Wm H Muller, Rotterdam
LOCUSTBEAN GUM—1,007 bgs, Morningstar Nicol, Portimao
1,120 bgs, Bank of N Y, Valencia
455 bgs, J L Quesada, Valencia
20 bgs, Orbis Products Corp, Genoa
100 bgs, T M Duche & Sons, Genoa
400 bgs, Morningstar Nicol, Genoa
MACE—5 cs, Knight Smith & Co, Kingston
50 cs, A G Dunn, Rotterdam
7 cs, Kellys America Ltd, Rotterdam
25 bgs, Rotterdam
MAGNESIUM CARBONATE—100 cs, Chas L Huisking & Co, Liverpool
MENTHOL—200 cs, Amertrade Inc, Santos
14 cs, Biddle Sawyer Corp, London
88 cs, River Plate Corp, Rio de Janeiro
MERCURY—16 flks, Tampico
METHYL FUMARATE—1 cs, Bios Lab, London
MONTAN WAX—210 bgs, Wax & Rosin Products, Hamburg
MUSTARD SEED—200 bgs, Becker Mayer Seed Co, Copenhagen
225 bgs, C Gulden, London
MYRISTIC ACID—5 dms, Aceto Chemical Co, Liverpool
MYROBALANS—3,456 bgs, Barkey Importing Co, Bombay
MYRRH GUM—96 bgs, Meer Corp, Aden
NAPHTHALENE—500 bgs, Gallard Schlesinger, Havre
NAPHTHOL—2 dms, Rotterdam
NICKEL ACETATE—25 bgs, Amplex Chemical Co, Bremen
SULFATE—34 bbls, Chas Page & Co, Gothenburg
30 bgs, Amplex Chemical Co, London
69 bbls, Groma Trading Corp, Bremen
80 cks, Donwill Co, Rotterdam
100 bgs, European Chemical Co, Genoa
7 bbls, Intercontinentale Export Co, Rotterdam
52 dms, Genoa
NUTMEG—20 bgs, Murbas Trading Co, Kingston
9 bgs, Knight Smith & Co, Kingston
3 cs, Knight Smith & Co, Kingston
12 bgs, Jafbro Corp, Rotterdam
67 bgs, R J Spitz, Rotterdam
OCOTEA CYMBARUM OIL—20 dms, Lo Curto & Funk, Itajai
175 dms, Norda Essential Oil & Chemical Co, Rio de Janeiro
OLIBANUM GUM—48 bgs, Wm M Allison & Co, Aden
OLIVE OIL—150 dms, Guaranty Trust Co, Valencia
100 dms, Bankers Trust Co, Valencia
100 dms, National City Bank, Valencia
125 dms, Atlantic Bank of N Y, Seville
30 dms, First National Chicago, Seville
125 dms, Guaranty Trust Co, Seville
149 dms, Credit Suisse, Malaga
55 dms, Credit Suisse, Seville
50 dms, Manufacturers Trust Co, Seville
50 dms, Caruso Products, Casablanca
50 dms, Colivo Packing Co, Casablanca
ORRIS ROOT—67 bgs, W Mahneke, Casablanca
PALMAROSA OIL—2 dms, George Luelders & Co, Marseille
PALMKERNEL OIL—224 crts, B M T Commodity Corp, Rotterdam
200 crts, Rotterdam
PAPAIN—56 cs, Chas L Huisking & Co, Colombo
19 cs, East Asiatic Co, Dar es Salaam
20 cs, D & S Chemical Corp, Mombasa
74 cs, American Ferment Co, Mombasa
26 cs, Ludwig Mueller, Mombasa
4 cs, Chas L Huisking & Co, Mombasa
104 hf chts, Chas L Huisking & Co, Colombo
PAPRIKA—100 bgs, J H Forbes, Rijeka
100 bgs, Manufacturers Trust Co, Alicante
PARSLEYSEED OIL—1 can, Magnus Mabee & Reynard, Hamburg
PACHOULI OIL—40 dms, Tombarel Porducts Corp, Penang
PEATMOSS—11,226 bls, Premier Peatmoss Corp, Bremen
480 bls, Lewis Intern Co, Bremen
2,000 bls, Lion Trading Co, Bremen
2,500 bls, Fafard, Bremen
2,000 bls, W Heimann, Bremen
2,525 bls, Marine Midland Trust Co, Bremen
250 bls, National Distributors, Bremen
1,650 bls, New Amsterdam Import Co, Bremen
978 bls, E Dunwoody, Bremen
3,550 bls, Trans Sphere Trading Co, Bremen
2,000 bls, Gellco Inc, Hamburg
1,500 bls, J E Bernard, Hamburg
500 bls, E J Lang, Hamburg
500 bls, Gellco Inc, Bremen
825 bls, Halfmoon Mfg & Trading Co, Rotterdam
600 bls, C Gastmeyer, Rotterdam
400 bls, Dana Scott Co, Liverpool
500 bls, Bruco Peatmoss Corp, Bremen
1,000 bls, National Distributors, Hamburg
2,000 bls, E J Lang, Bremen
PECTIN—27 kgs, Jafbro Corp, Copenhagen
PEPPER, BLACK—160 bgs, Otto Gerdau, Cochin
80 bgs, Indoscan Corp, Cochin
80 bgs, C Czarinkow, Cochin
80 bgs, M Golodetz, Cochin
480 bgs, Borneo Sumatra Trading Co, Kuching
120 bgs, C Czarinkow, Kuching
160 bgs, Joensson & Cross, Cochin
80 bgs, A G Dunn, Cochin
35 bgs, Internatio Rotterdam, Singapore
120 bgs, G H Winram, Kuching
840 bgs, Far Eastern Rubber Importers, Kuching
120 bgs, Ludwig Mueller, Colombo
70 bgs, Ludwig Mueller, Singapore
480 bgs, Internatio Rotterdam, Kuching
140 bgs, Singapore
80 bgs, Colombo
30 bgs, Kuching
RED—141 bgs, Mombasa
137 bgs, Wm E Martin, London
WHITE—35 bgs, Internatio Rotterdam, Singapore
PETITGRAIN OIL—5 dms, Chemical Bank, Buenos Aires
5 dms, Chase Manhattan Bank, Buenos Aires
5 dms, National City Bank, Buenos Aires
3 dms, John D Walsh Co, Port au Prince
9 dms, Dodge & Olcott, Buenos Aires
PETROLEUM, CRUDE—194,509 bbls, Phillips Petroleum Co, Puerto La Cruz
200,000 bbls, Esso Standard Oil Co, Puerto La Cruz
123,320 bbls, Esso Standard Oil Co, La Salina
85,129 bbls, Esso Standard Oil Co, Las Piedras
a-PICOLINE—26 dms, James E Fox, London
POLLACKLIVER OIL—150 dms, Arista Oil Products Co, Yokohama
125 dms, Bankers Trust Co, Yokohama
100 dms, Manufacturers Trust Co, Yokohama
200 dms, National City Bank, Yokohama
250 dms, Yokohama
POLYVINYL CHLORIDE—22 cs, Marine Midland Trust Co, Split
POPPY SEED—200 bgs, Biddle Purchasing Co, Rotterdam
100 bgs, C M Van Sillevoldt, Rotterdam
200 bgs, Rotterdam
POTASSIUM CYANIDE—140 dms, Canadian Bergom Co, Hamburg
178 dms, Chemical Manufacturing Co, Liverpool
FERRICYANIDE—200 bbls, Atlantic Raw Materials, Hamburg
FERROCYANIDE—800 bgs, Haras Co, Rotterdam
MURIATE—2,096 tons, French Potash & Import Co, Antwerp
SILICATE—1,580 bgs, Sylvania Electric Products, Rotterdam
POTATO STARCH—440 bgs, Stein Hall & Co, Rotterdam
PYRETHRUM FLOWERS—125 bls, Gulf Oil Corp, Mombasa
PYROGALLIC ACID—5 cs, Karr Ellis & Co, London
QUEBRACHO EXTRACT—800 bgs, Buenos Aires
RADIUM ELEMENT—1 cs, Radium Chemical Co, Antwerp
RAPESEED—100 bgs, Foreign & Domestic Sales Corp, Rotterdam
RED IRON OXIDE—50 bbls, Whittaker Clark & Daniels, Malaga
300 bgs, Whittaker Clark & Daniels, Malaga
700 bgs, C J Osborn Co, Malaga
2,070 bgs, C B Chrystal Co, Malaga
2,000 bgs, Smith Chemical & Color Co, Malaga
3,044 bgs, J Lee Smith, Malaga
200 bbls, Malaga
RHAMNI FRANGULAE — 100 bls, Meer Corp, Rijeka
RICE GLUTEN—80 bgs, Standard Brands Inc, Rotterdam
ROSE BUDS—50 bgs, W Mahneke, Casablanca
ROSEMARY LEAVES—100 bgs, E E Bier, Alicante
ROSEWOOD OIL—2 dms, Lautier Fils Inc, Paramaribo
5 dms, J E De Sousa, Paramaribo
10 dms, John D Walsh Co, Paramaribo
10 dms, Poons Co, Paramaribo
RUTILE SAND—5,965 bgs, National Lead Co, Brisbane
2,000 bgs, International Titanium Corp, Brisbane
RYANIA—100 tons, Leonhardt & Brush, Port of Spain
SAFFRON—2 cs, Galvanoni & Nevy Bros, Genoa
SALICYLAZO SULFAPYRIDINE—20 dms, Pharmacia Lab, Gothenburg
SALICYLIC ACID—40 dms, R J Saunders & Co, Rotterdam
SANDALWOOD OIL—2 cs, Polarome Manufacturing Co, Genoa
SCARLET BASE—5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
SEEDLAC—250 bgs, Bradshaw Praeger & Co, Calcutta
100 bgs, Wm Zinsser & Co, Calcutta
300 bgs, Lind Mayer & Co, Calcutta
1,200 bgs, Calcutta
SERPENTINA ROOT—39 bgs, S B Penick & Co, Colombo
SESAME SEED—1,000 bgs, Wm G Scarlett, Corinto
200 bgs, Levy & Levis Co, Corinto
250 bgs, Archibald & Kendall, Corinto
100 bgs, Atlantic Processing Corp, Corinto
150 bgs, Louis Furth, Alexandria
225 bgs, Ludwig Mueller, Alexandria
HULLED—500 bgs, Wm G Scarlett, Corinto
550 bgs, Levy & Levis Co, Corinto
750 bgs, Louis Furth, Corinto
100 bgs, Atlantic Processing Co, Corinto
SHELLAC—87 bgs, F H Paul & Stein Bros, Hamburg
54 bbls, F H Paul & Stein Bros, Rotterdam
SODIUM ARSENATE—105 dms, Harry Dixon & Sons, Glasgow
FERROCYANIDE—448 bgs, Antwerp
NITRITE—80 cks, Republic Chemical Corp, Hamburg
SILICOFLUORIDE—70 bbls, Samin Corp, Rijeka
SULFATE—4,580 bgs, Lo Curto & Funk, Antwerp
STARCH—420 bgs, Rotterdam
STRAWBERRY LEAF—3 bls, S B Penick & Co, Rijeka
SULFUR—40 cks, Chas L Huisking & Co, Liverpool
SUMAC—676 bgs, River Plate Corp, Palermo
TAPIOCA FLOUR—400 bgs, American Metagraph Co, Itajai
900 bgs, Geismar & Co, Bangkok
1,000 bgs, Stein Hall & Co, Bangkok
500 bgs, Internatio Rotterdam, Bangkok
1,000 bgs, Bangkok
TARTAR—288 bgs, Tartaric Raw Materials, Marseille
525 bgs, Tartaric Raw Materials, Oran
TARTARIC ACID—91 dms, Royal Bank of Canada, Rotterdam
TEA OF MATTE—2 bgs, Standard Brands Inc, Paranagua
THIAMINE HYDROCHLORIDE—20 dms, National City Bank, Yokohama
THYME LEAVES—91 bgs, H Marmorek & Son, Marseille
78 bls, Seek & Kade, Marseille
200 bgs, E E Bier, Alicante
TRICHLOROACETIC ACID—8 dms, Conray Products Co, Hamburg
TRICHLOROETHYLENE—77 dms, Chemical Manufacturing Co, Liverpool
TRIHYDROXYBENZENE—4 kgs, D F Young, Liverpool
TUNG OIL—114 tons, Internatio Rotterdam, Buenos Aires
330 tons, Pacific Vegetable Oil Corp, Buenos Aires
TUNU GUM—318 bgs, L A Dreyfus & Co, Puerto Cabazas
ULTRAMARINE BLUE—100 bgs, T H Deutz & Co, Antwerp
UVA URSI LEAVES—150 bgs, E E Bier, Alicante
VALONIA CUPS—4,296 bgs, Chemical Bank, Izmir
454 bgs, Izmir
EXTRACT—2,531 bgs, Izmir
VANILLA BEANS—20 cs, F Huber & Co, Semarang
14 cs, J Manheimer, Marseille
4 cs, F Huber & Co, Tandjong Priok
30 cs, Bordeaux
15 cs, Marseille
VETIVER OIL—1 dm, Olfactors Inc, Port au Prince
2 dms, Ungerer & Co, Port au Prince
VITAMIN B1—30 dms, National City Bank, Yokohama
WATTLE BARK—1,690 bls, Hammond & Carpenter, Durban
EXTRACT—1,068 bgs, River Plate Corp, Durban
WHITING—1,200 bgs, N H Weitzner, Antwerp
800 bgs, Whittaker Clark & Daniels, London
5,000 bgs, Antwerp
WOOL GREASE—23 dms, Manufacturers Trust Co, Antwerp
100 dms, N I Malmstrom, Bremen
100 dms, Hummel Chemical Co, Bremen
51 cks, Robinson Wagner Co, Genoa
100 dms, Croda Inc, Genoa
80 dms, Chemical Bank, Genoa
87 dms, Irving Trust Co, Kobe
49 dms, Melbourne
ZINC SULFIDE—1,600 bgs, C J Osborn Co, Rotterdam
ZIRCON SAND—3,040 bgs, International Titanium Corp, Brisbane
5,000 bgs, National City Bank, Brisbane

Baltimore

OCOTEA CYMBARUM OIL—23 dms, American Metagraph Co, Itajai
OREGANO—550 bgs, A Millner & Co, Piraeus
PEATMOSS—248 bls, E S Hubbert, Bremen
400 bls, Bruco Peatmoss Corp, Bremen
553 bls, Premier Peatmoss Corp, Bremen
1,200 bls, H J Hazelhurst, Bremen
TALLOW ALCOHOL—321 kgs, American Alcolac Corp, London

Charleston

TAPIOCA FLOUR—3,000 bgs, Stein Hall & Co, Itajai

Los Angeles

AMMONIUM BICARBONATE—50 dms, C M C Chemicals Inc, Glasgow
CHLORIDE—400 bgs, Chemical Mfg Co, Hull
ANTIMONY OXIDE—350 bgs, Harshaw Chemical Co, Hull
CALCIUM CHLORIDE—440 bgs, Western Chemical & Mfg Co, Amsterdam
COPRA—1,000 long tons, American Trust Co, Cebu
500 long tons, American Trust Co, Legaspi
500 long tons, American Trust Co, Tabaco
CAKE—600 long tons, Procter & Gamble Co, Manila
EARTH COLORS—2,250 bgs, Naftone Inc, Bremen
MOLASSES—10,291 tons, S F Pellas & Co, Corinto
1,900 tons, Southwestern Sugar Molasses Co, Inampulugan
NAPHTHALENE—111 bgs, Westco Chemical Co, Antwerp
PEATMOSS—250 bls, Wilbur Ellis Co, Bremen
1,250 bgs, Gellco Inc, Bremen
1,000 bls, Atkins Kroll & Co, Bremen
200 bls, H V Nootbaar & Co, Bremen
500 pkgs, Trans Sphere Trading Co, Bremen
PETROLEUM, CRUDE—9,408 tons, Douglas Oil Co, Salinas
15,844 tons, Texas Co, Las Piedras
SESAME SEED—100 bgs, Grace & Co, Corinto
100 bgs, Atlantic Processing Mills Corp, Corinto
100 bgs, Hismoco American Co, Corinto
350 bgs, H M Newhall & Co, Corinto
SODIUM CYANIDE—320 dms, C M C Chemicals Inc, Glasgow
TAPIOCA FLOUR—600 bgs, Stein Hall & Co, Inc, Santos
1,501 bgs, Stein Hall & Co Inc, Bangkok
UREA—1,000 bgs, Chemical Mfg Co, Hull
2,000 bgs, C M C Chemicals Inc, Glasgow
WOOL GREASE—10 dms, Pacific Coast Borax Co, Glasgow

Norfolk

LOCUST BEAN GUM—220 bgs, Genoa
PEATMOSS—950 bls, J M Trading Corp, Bremen
500 bls, Trans Sphere Trading Corp, Bremen

Philadelphia

BONEMEAL—3,000 bgs, Kind & Knox, Calcutta
CAMPHOR OIL—10 dms, Fairfield Chemical Co, Nagoya
CRESYLIC ACID—200 dms, Glasgow
FISHLIVER OIL—50 dms, Bankers Trust Co, Yokohama
FLUORSPAR—2,040 tons, Chemical Bank, Aviles

GLYCERINE—249 tons, Chemical Bank, Buenos Aires
120 dms, Willits Co, Kobe
92 dms, Alexandria
GYPSUM—5,538 tons, U S Gypsum Co, Little Narrows
LICORICE ROOT—4,926 bls, MacAndrews & Forbes, Beirut
3,735 bls, MacAndrews & Forbes, Taranto
LOCUST BEAN GUM—200 bgs, T M Duche & Sons, Genoa
NAPHTHALENE—500 bgs, Gallard Schlesinger, Hamburg
684 bgs, Rotterdam
OLIVE OIL—35 dms, Guaranty Trust Co, Seville
PEATMOSS—300 bls, Tupman Thurlow, Hamburg
1,250 bls, C. La Fard, Bremen
1,350 bls, Premier Peatmoss Corp, Bremen
500 bls, Van Zanten & Co, Bremen
300 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
800 bls, Keer Maurer, Bremen
1,000 bls, E J Lang, Bremen
1,000 bls, Premier Peatmoss Corp, Hamburg
PETROLEUM, CRUDE—241,891 bbls, Atlantic Refining Co, Puerto La Cruz
118,138 bbls, Atlantic Refining Co, Tripoli
116,198 bbls, Atlantic Refining Co, Covenas
334,208 bbls, Atlantic Refining Co, Pamatacual
110,222 bbls, The Texas Co, Puerto La Cruz
185,651 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
771,970 bbls, Gulf Oil Corp, Mena Al Ahmadi
415,677 bbls, Gulf Oil Corp, Puerto La Cruz
255,172 bbls, Cities Service Oil Co, Mena Al Ahmadi
RUTILE SAND—3,952 bgs, E S & A Bank, Brisbane
WHITING—36 tons, Pluess Staufer, Antwerp
82 tons, Antwerp
ZIRCON SAND—7,915 bgs, E S & A Bank, Brisbane

San Francisco

COPRA—2,021 tons, Cargill Inc, Cebu
378 tons, Cargill Inc, Jolo
500 tons, Cargill Inc, Zamboanga
FISHLIVER OIL—75 dms, Wheeler & Miller, Yokohama
FISHMEAL—2,000 bgs, Woodward & Dickerson, Antonio
GRAPHITE—250 bgs, Pacific Graphite Co, Colombo
LOCUST BEAN GUM—100 bgs, Genoa
MAGNESIUM CHLORIDE—1,000 bgs, H B Thomas & Co, Hamburg
PETROLEUM, CRUDE—36,675 tons, Standard Oil Co, Sungai Pakning
121,086 bbls, Tide Water Associated Oil Co, Las Piedras
POLYVINYL ALCOHOL—5 ctns, Standard Specialty Co, Kobe
SALICYLIC ACID—10 dms, Antwerp
SODIUM GLUTAMATE, MONO—10 cs, Lee's Agency, Kobe
NITRATE—2,096 bgs, Guaranty Trust Co, Tocopilla
TAPIOCA FLOUR—1,690 bgs, Internatio Rotterdam, Bangkok
ZINC SULFATE—28 bbls, McCormick & Baxter, Gothenburg

Current Prices

—Continued from page 35

Zinc dust, pigment, bbls., c.l., works	lb.	.16¼-	—
l.c.l., works	lb.	.17¼-	—
Fluoride bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld	lb.	.21½-	—
l.c.l., frt. alld	lb.	.22 -	.37½
Metal, prime western slabs, E. St. Louis	lb.	.13 -	—
New York	lb.	.13½-	—
Naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.24½-	—
10% Zn. dms. frt alld	lb.	.30 -	—
Oxide, pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14 -	—
l.c.l., same basis	lb.	.15 -	—
leaded 25%, bgs., c.l., millsd, frt. alld.	lb.	.14⅝-	—
l.c.l., same basis	lb.	.15⅝-	—
30%, bgs., c.l., same basis	lb.	.14⅞-	—
l.c.l., same basis	lb.	.15⅞-	—
French process, coml., green seal, bgs., c.l., frt. alld	lb.	.15¾-	—
l.c.l., same basis	lb.	.16¾-	—
red seal, bgs., c.l., same basis	lb.	.15¼-	—
l.c.l., same basis	lb.	.16¼-	—
white seal, bgs., c.l., same basis	lb.	.16¼-	—
l.c.l., same basis	lb.	.17¼-	—
USP, ctns., c.l., frt. alld	lb.	.17¼-	—
l.c.l., same basis	lb.	.18¼-	—
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfonate, NF, gran., dms.	lb.	.39 -	—
powd., dms	lb.	.42 -	.49
Resinate, precip., 7.2-7.6% Zn, dms., frt. alld	lb.	.29 -	—
Silicofluoride, bbls., works	lb.	.12½-	.14
Stearate, tech., USP, ctns., c.l.,	lb.	.37 -	—
l.c.l.,	lb.	.38 -	.42
Sulfate, cryst., 22% ZN, bgs., c.l., works, frt. alld	100 lbs.	8.05 -	—
l.c.l., same basis	100 lbs.	8.60 -	—
flake, 25½%, Zn, bgs., c.l., works,	100 lbs.	6.00 -	7.40
l.c.l., works	100 lbs.	7.00 -	7.90
powd., monohydrate, 36% Zn, bgs., c.l., dlvd E.	100 lbs.	8.50 -	—
l.c.l., dlvd. E	100 lbs.	9.50 -	—
Zinc sulfate in bbls. 40c. higher.			
USP, gran., dms	lb.	.26 -	—
Sulfide, pure, bgs., c.l., dlvd.	lb.	.2530-	—
Undecylenate, dms.	lb.	2.25 -	2.50
Yellow (see Yellow, zinc).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	9.65 -	—
bbls., c.l., works	100 lbs.	10.25 -	—
l.c.l., works	100 lbs.	10.75 -	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l.	lb.	.25½-	—
l.c.l.	lb.	.26 -	.41½
normal, dms., l.c.l., works	lb.	.52 -	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½-	—
5 tons to c.l., works	lb.	.03⅝-	—
1 ton to 9,999-lb. lots, works.	lb.	.04 -	—
smaller lots, works	lb.	.06½-	—
milled, bgs., c.l., works	lb.	.04½-	—
5 tons to c.l., works	lb.	.04⅝-	—
1 ton to 9,999-lb. lots, works.	lb.	.04⅝-	—
500 to 1,999-lb. lots, works.	lb.	.07½-	—
Zircon (G) in barrels, 1c. higher.			
Zirconium acetate, 13% sum. ZrO_2, c.l., 30,000 lbs. minimum, works	lb.	.23 -	—
Hydride, cns., works	lb.	7.00 -	8.45
Nitrate, dms., ex whse	lb.	4.50 -	7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works	lb.	1.50 -	—
lump, electric-fused, bgs., c.l., works	lb.	.44 -	—
5-ton lots, works	lb.	.44½-	—
1 ton to 9,999-lb. lots, lbs., works	lb.	.45 -	—
CP, white, grd., bbls., or bgs., works	lb.	1.50 -	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½-	—
smaller lots, works.	lb.	.48 -	—
milled, electric-fused, bgs., c.l., works	lb.	.59 -	—
5-ton lots, works	lb.	.59½-	—
1 ton to 9,999-lb. lots, works	lb.	.60 -	—
500 to 1,999-lb. lots, works	lb.	.60½-	—
smaller lots, works.	lb.	.63 -	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½-	—

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- TELLURIUM TETRABROMIDE
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Essential Oils, Aromatics, Flavorings

The spot market was fairly active last week. One important oil, lemongrass, firmed considerably, it was reported, from the low point it had reached last month. Some of the low prices made a month ago were considered due to the predicted Indian crop of 1,000 tons. Recently, European demand for the oil has been good in the Indian market and evidently a squeeze position had developed among shippers attempting to fulfill commitments, one source noted. Another reason for lack of supply has been the slowdown of the distillation operations which was attributed to the native festival season.

The outside price for mace oil was moved up 40 cents to $4, though the basic price continued to stand at $2.75. Production appears to be moving at an anticipated level for this time of year, one distributor noted. Though no excess is apparent, there is no dearth of the product in the market.

Mexican distilled lime advanced to $3.10 last week, a 10 cent advance over the previous range of $3.10 to $4.75. Java-type citronella declined 25 cents, creating a range of $2 to $2.75. The previous listing had been $2.25 to $2.75.

The spot market showed itself most active in spices and seeds. In many areas, reports of heavy crops in producing countries brought an uneasiness to the market. Pepper, in spite of a slight rise in price, stood in this column. The primary cause was considered to be weakness in the Indian market.

Current stocks of most varieties of ginger root in the spot market were light and the prospects for replacement were not considered good, it was noted. The next crop of Sierra Leone ginger should not reach here before May of next year, and since there is no pressure to sell in the country of production, there is little if any spice left at present.

The citrus crop in Chile will be 30 to 35 percent below that of last year, according to trade estimates reported by the Foreign Agricultural Service. The losses are attributable to extreme cold in July and to dry weather. Earlier estimates were 945,000 boxes for oranges and 725,000 boxes for lemons.

Amyris—Dealers dropped their quotations 5c. on this product, creating a range of $1.35 to $1.95. Previously there had been a range of $1.40 to $1.95.

Anise—Demand continued on a good level last week with the spot market remaining firm. Supplies, though tight, covered most immediate needs. In spite of the tightness of the market, there were no quotation variations.

Geranium—The spot market remained very firm last week with the supply continuing tight. Responsible for the supply situation was the limited aspects of the North African crop, and the political disturbances in the area, distributors noted. There were no quotation changes.

Citronella — Java-type citronella declined 25c. last week, creating a range of $2 to $2.75. Citronella had previously stood at $2.25 to $2.75. This loosening of Java-type, however, has not been reflected in the markets of either Java or Ceylon qualities. In both oils, prices remained static.

Lavandin—Good reports have been received on the new crop, which will be large, it has been reported. Heavy shipments will not leave France for another month to six weeks. The current price range is from $2.85 to $3.55.

Lemon—The fall hiatus is present in this market, as a result of the leveling-off of seasonal sales to beverage makers. Production has fallen off a bit, with supply continuing plentiful and ample to cover trade needs. There were no quotation changes.

Lemongrass—The market for this commodity firmed considerably last week, it was reported, from the low point it had reached last month. Some of the low prices paid a month ago at the source were considered due to the predicted Indian crop of 1,000 tons. Recently, European demand for the oil has been good in the Indian market and evidently a squeeze position has developed among shippers who are trying to fulfill commitments, one source noted. Supplies of oil have not been too plentiful because the distillation has not been completed and there was some cessation of activity due to the festivals. If European demand continues throughout the year, the lemongrass market may not become as weak as was freely predicted during the early summer months.

Lime—Mexican distilled lime advanced to $3.10 last week, a 10c. advance over the previous listing of $3.10 to $4.75. East Indian and West Indian expressed remained steady at previous prices of $3 to $4.75 and $7 to $8, respectively.

Mace—This product moved its ceiling price up 40c. to $4, though its basic price continued to stand at $2.75. Production appears to be moving at an anticipated level for this time of year. Though there appears to be no excess, there is no great absence of the product in the market.

Spearmint—Out of an estimated total of 610,000 pounds of spearmint, about one third of it will be supplied by the far west. Factors responsible for this are:—(1) Midwest plantings are down 20 percent because of large carryovers; and (2) central state yields are likely to drop as much as 30 percent because of early frosts. The contribution of the far west to the total spearmint crop was only 22.1 percent.

Price Trends

Advanced

Cardamom seed, decorticated, Guatamalan, 20c. per lb.
Cinnamon, Ceylon, #2, 3c. per lb.
"0000" bgs., afloat, 1c. per lb.
Clove, Zanzibar, 1c. per lb.
Cumin, Iranian, ¼c. per lb.
Ginger, Cochin, 2c. per lb.
Oil, lime, Mexican, 10c. per lb.
Pepper, black, 3c. per lb.
Red, Japanese, 2c. per lb.
Nigerian, 1c. per lb.

Reduced

Anise seed, Spanish, ½c. per lb.
Celery seed, French, 1c. per lb.
Indian, ¼c. per lb.
Corlander seed, Moroccan, ½c. per lb.
Dill seed, dewhiskered, ½c. per lb.
Fennel seed, Czech, medium, 1½c. per lb.
Roumanian, 2½c. per lb.
Ginger, #2, 1c. per lb.
#3, 1c. per lb.
Laurel, Greek, 1c. per lb.
Mace, Siauw, siftings, 25c. per lb.
Mustard seed, Montana, Oriental, ¾c. per lb.
Yellow, ½c. per lb.
Oil, amyris, 5c. per lb.
Citronella, Java-type, 25c. per lb.
Pimento, Jamaica, 1½c. per lb.
Mexican, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
134.75	134.72	134.50	138.10

(*For Current Prices see Page 9*)

Miscellaneous

Cardamom Seed — The market for Guatemalan decorticated cardamom firmed up considerably last week with a price rise of 20c., it was reported. The Commodity climbed from its previous listing of $2.55 to $2.75. There were no price shifts for fancy, selected or Ceylon green.

Cassia — The market firmed up last week, with all grades enjoying a slightly better demand. Prices as yet have not changed materially but the stockpile in New York has been whittled down. Present levels are still very reasonable and adequate reserves should be maintained.

Celery Seed—Both French and Indian celery seed declined slightly this week, it was reported. French moved down to 29c. from its previous listing of 30c. Indian dropped ¼c. to 16c. It previously had been listed at 16¼c.

Cinnamon—Ceylon No. 2 advanced 3c. to 64c. last week, it was reported. "0000" afloat rose from the previous listing of 84c. to 85c.

Clove—Zanzibar clove appeared to be showing a firmer front last week, with a price advance of 1c. over its previous listing of 46c. Madagascar clove continued at the old listing of 43c.

Fennel Seed—The market was easier last week, it was reported, with both Czech medium and Roumanian declining in price. Czech, at a previous listing of 11c., fell away 1½c. to 9½c. Roumanian declined from 12c. to 9½c. Both Indian and Argentine fennel remained at their old listing of 12c. and 17c., respectively.

Ginger—Cochin ginger climbed 2c. to 38c. from its previous listing of 36c. Jamaica No. 2 declined to 54c. from the previous 55c. and No. 3 went down to 52c. from 53c. Current stocks of most varieties of ginger root in the spot market are light and the prospects for replacement are not considered good, it has been reported. The next crop of Sierra Leone ginger reportedly will not reach here before May of next year, and since there is no pressure to sell at origin, there is little if any spice left at present. While it is too early to make any predictions about the next crop, most sources speak of a

For Late Market Developments, See Page 4

very tight supply position for the next few months.

Laurel—Portuguese quality declined 1c. last week from its former listing of 12c., it was reported. Greek and Yugoslavia quality continued at their old listings. The ceiling for Turkey rose to 25c. giving it a range of 24c. to 25c.

Mace — Siauw siftings declined to a $1.45 to $1.65 range last week from the earlier high level of $1.70 per pound. West Indian shipment stood at the $1.60 listing. The market has begun to firm up at source, with a scarcity of the product noticeable. There is no sign of a relief until the February harvest, most producers noted.

Mustard Seed—This product continued fairly steady last week, it was noted. The only price variation was that of Montana Oriental declining to 8¼c. from 9c., and yellow quality dropping to 10½c. Dutch mustard seed remains unobtainable and English yellow continued unchanged.

Pepper—Malabar black pepper advanced 3c. last week and was selling at 42c. per pound, it was reported. Japanese red Hontakas advanced 1c. to a 33c.-34c. range; Nigerian pepper advanced to 30c. from the previous 29c. listing, and Turkish moved up 1c. to 24c.-25c. Red gondar and Mombasa remained at their old listings. Japanese birdseye quality was unavailable. In spite of the slight general advance in prices, an uneasiness appeared to exist about the market. Its cause, according to one source was weakness in the Indian market during October and November. Locally, another source noted, there were adequate stocks in New York and afloat, thus offsetting any likelihood of a squeeze before new-crop shipments are made. Continued interest has been shown in new crop Japanese red peppers and prices ruled about steady in Japan. Old crop holdings of all grades are very limited.

Pimento—Jamaica pimento was quoted at a range of 85½c. to 89c. last week, it was reported. This was a 1½c. drop from the previous price. Mexican also suffered a dropback of 2c., declining to 68c. from its previous 70c.

One of the largest Jamaica crops of recent years was noted with a total harvest of 2,132 tons. Buyers were reported buying in small half ton lots against normal five ton lots. Imports by American buyers were 125 tons below normal at 539 tons. The previous average was 665.4 tons.

Poppy Seed—Argentine poppy seed looked firmer last week with a 1c. advance to 19c. Dutch poppy seed advanced its ceiling ½c. giving it a range of 22c. to 23c. Polish quality also advanced its ceiling ½c., giving it a range of 20½c. to 21½c. Turkish continued unavailable and Iranian quality continued at its old listing of 15c.

Sesame Seed—A quantity of Nicaraguan natural became available last week, it was reported. The spot price was 18c. Salvadorian natural, previously selling at a range of 17c. to 18c. was sold out on spot. Some Egyptian natural and hulled sesame seed also became available. The natural was selling for 16¾c. and the hulled for 21c. Syrian and Nicaraguan quality remained at their old listings.

PHS Appoints Dr. McManus To Advisory Health Council

Appointment of Dr. R. Louise McManus of Columbia University to the National Advisory Health Council has been announced by Dr. Leonard A. Scheele, Surgeon General of the Public Health Service. The council meets three times a year to assist the Surgeon General on national health matters.

Dr. McManus, professor and director of the division of nursing education, Teachers College, Columbia, will advise and make recommendations to the Surgeon General regarding grant activities of the National Micro-biological Institute, Bethesda, Md., one of the principal research agencies of the Public Health Service.

Cosmetic Chemists to Meet In Chicago on October 11

The Chicago chapter of the Society of Cosmetic Chemists will meet October 11 at Henrici's restaurant in the Merchandise Mart at 6 p.m. The speaker will be Miriam Gibson Franch, beauty editor of McCall's Magazine, who will talk on "How Are Women's Beauty Habits Changing?"

PAINT WITH A DIFFERENCE

More and more paint manufacturers are turning to the industrial perfumer for product malodor relief. Masking compounds for paints have been a primary challenge to the perfume chemist, involving as they do the twofold problem of deodorizing the solvents and thinners, then masking the oils and resins. In the D&O Product Development Labs, this problem has received extensive attention resulting in the development of two specific masking products.

Paideos which cover the disagreeable odor of oils or resins, and Petrodors which subsequently deodorize the solvents or thinners. Both have been exhaustively tested in the labs and in addition to their primary functions, they will not discolor paint or interfere with its flow or drying. For trial quantities or individual product testing in the Industrial Odorants Labs, consult your D&O representative.

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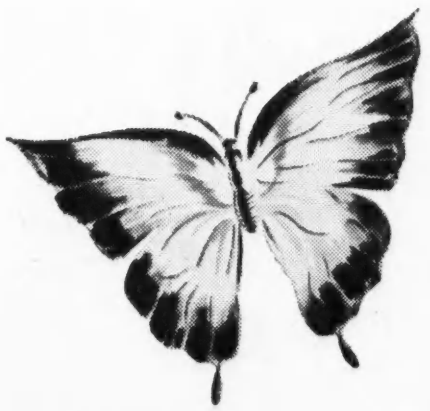

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Greek Gov't Lets Contract For Development of Lignite

Greece has granted the Hellenic Company, of Chemical Products & Fertilizers, Ltd., a forty-year concession to develop the lignite resources at Ptolemais, Macedonia, via a recently-signed contract, according to the Department of Commerce.

The cost of the project, according to Greek press reports, is estimated at $20,000,000 which is to be financed as follows:—$13,500,000 from American economic aid; $3,000,000 credit from the German firm, Krupp; and $3,500,000 from the present contractor.

The contract provides for annual production of 1,800,000 metric tons of lignite, construction of factories to produce 200,000 metric tons of lignite briquets and 100,000 metric tons of semi-coke annually, and transfer of the project and any reserve funds to the Greek government at the end of forty years.

The Public Power Corporation, a Greek governmental agency, will utilize the end products of the lignite project for the 65,000 kilowatt-hour thermo-electric plant it will construct in the Plolemais area to supply additional electric power for the national network of power lines. Briquets are to be sold chiefly to the Greek State Railways, and the semi-coke is expected to be sold to the metal-working industry in Greece.

The Hellenic American General Lignite Products Company Ltd., which previously held this concession, has been relieved of contractual obligations.

AEC Announces Awarding Of 69 Research Contracts

The award of sixty-nine unclassified physical research contracts with universities and private research institutions has been announced by the Atomic Energy Commission. Eighteen are new contracts, and the remainder are renewals of contracts which have been in force.

The contracts, which generally were for a term of one year, were let as part of the AEC's continuing policy of utilizing private research laboratories in conducting research related to atomic energy. Contract proposals are usually reviewed by scientists who are well acquainted with the field of the proposed research and its relevance to the atomic energy program. Their reviews are taken into consideration by the AEC division of research before a decision is made whether or not to accept the proposal. The contracts are negotiated and administered by AEC operations offices.

Generally, the institutions participate with the AEC in defraying the costs of the research. The institution contributes the funds and services which it normally devotes to work in that field, and the AEC provides additional assistance to permit the work to proceed more rapidly or with an expanded scope.

Atlas Joins Atom Group To Build Nuclear Reactor

Atlas Powder Company, Wilmington, Del., last week announced that it is joining eight other major firms and a leading university in building and operating the world's first privately-owned nuclear reactor for industrial and humanitarian research. Edward J. Goett, vice-president in charge of Atlas' chemicals division, will be the firm's offcial representative in the atomic project.

Initiator of the project, which was first announced in August (OPD 8/15/54), is AMF Atomics, Inc., of which Gen. Walter Bedell Smith is board chairman. Besides Atlas and AMF Atomics, other participants include U.S. Rubber Company, International Nickel Company, American Tobacco Company, Continental Can Company, Socony Mobil Oil Company, Corning Glass Works and Chas. Pfizer & Co. The specific site, as well as the university which will provide the technical and operating staff, are expected to be announced shortly.

Cosmetic Chemists To Honor

—*Continued from page 5*

Fritzsche Brothers as chief research chemist in that year.

Dr. Guenther published the first volume of his authoritative work, *The Essential Oils*, in 1948. The sixth and final appeared three years ago. Recognized as an outstanding achievement in its field, the series covers every phase of essential oils considered important by industry and science. Dr. Guenther plans a supplemental volume within a few years, to include the most recent additions to the scientific knowledge of fragrances. Shorter works by the medalist, totaling over 150 articles, have appeared in technical and scientific publications.

McKesson Drug Sales Mgr.

Francis L. Capers, former division manager of the Miami, Fla., division of McKesson & Robbins, Inc., and more recently connected with the general operations department of the company's home office in New York, has been appointed general drug sales manager. Mr. Capers has been with the McKesson organization since 1938.

Hercules Fills New Position In Its Synthetics Department

The appointment of Frank G. Oswald to a newly created position in the synthetics department of Hercules Powder Company, Wilmington, Del., was announced last week. Mr. Oswald has been named manager of new product sales for the department. In his new position he will be responsible for planning, coordinating, and supervising introductory sales activities and sales promotion for the department's new products.

Mr. Oswald's duties will encompass a wide variety of products including polyhydric alcohols and products of the xylene oxidation process. Mr. Oswald, who joined Hercules in 1937, has been assistant director of sales for the synthetics department for the past nine years.

Fritzsche Names Shumaker Philadelphia Branch Manager

Fritzsche Brothers, Inc., New York, has appointed James Shumaker manager of its Philadelphia branch. Mr. Shumaker succeeds Warren R. Godfrey, who last month was shifted to New York to head up the firm's perfume sales (OPD, 9/26/55).

Mr. Shumaker was previously manager of the Fritzsche office in Cleveland, Ohio, which will now be closed and most of its accounts transferred to the Cincinnati, Ohio, branch for future handling. Mr. Shumaker, a sales veteran of more than twenty years' service, will be assisted by Robert Hughes, who will continue to cover the accounts he has been handling since coming to the firm two years ago.

Pest Control Ass'n Meets

—*Continued from page 5*

Weatherway, University of Kansas, and "How to Make Your Advertising Work Harder," by A. C. Kammerman, Batten, Barton, Durstine & Osborn.

On October 19 these papers will be presented:—"Phases of Weed Control of Interest to the Pest Control Industry," by William Harvey, University of California; "Toxicity of Pesticides, Hazards and Precautions," by Justus A. Ward, Department of Agriculture; "New Developments in Rodenticides and Repellents," by Jack F. Welch, Fish and Wildlife Service; "Color Photography: Technics and Value to the PCO," by Roy Pence, University of California at Los Angeles, and "The NPCA Color Transparencies," by Philip J. Spear.

The program on the closing day will feature the following papers:—"Sanitation and Pest Control in Bakeries," by Louis J. King, jr., American Institute of Baking; and "Restaurant Sanitation Standards and Pest Control," by Robert J. Cameron, Denver (Colo.) Department of Health and Hospitals; "The Grain Sanitation Program," will be another part of the program, which will feature these papers:—"Entomological Problems," by Lyman S. Henderson, Department of Agriculture; "Rodent and Bird Control Problems," by Dorr D. Green, Fish and Wildlife Service and "The Role of the Pest Control Operator in Grain Sanitation," by M. S. Buckley.

This will be followed by the final business meeting, which will include the report of the executive secretary and the election of officers. The annual banquet will be held during the evening.

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Drugs, 1,128 bots. of 500 quinidine sulfate tablets, 108 bots. silver iodate precipitated, 240 5-lb. bots. soda lime, 672 1-lb. bots. sodium chloride, 4,416 ¼-lb. bots. sodium hydroxide, 240 1-lb. bots. sodium lauryl sulfate, inv. A-109, Oct. 17, Vets. Adm., Procurement Div., Supply Service, Vets. Adm. Bldg., Washington 25, D. C.; aureomycin hydrochloride, 250 mg., USP capsules, 100 per bot., 50 bots., terramycin, 250 mg. capsules, 100 per bot., 50 bots., hexavitamin tablets, 1,000 per bot., USP, 200 bots., ferrous gluconate, 5 grain tabs., 1,000 per bot., 200 bots., sulfadiazine tabs., USP, 7½ grain tabs., 1,000 per bot., 100 bots., procaine penicillin in oil with 2% aluminum monostearate, 300,000 units per cc in a 10 cc vial, 1,000 vials, benzathine penicillin G, dibenzylethylene-diamine dipenicillin G in aqueous suspension, 300,000 units per cc, in 10 cc vials, 500 vials, for Thailand, inv. 4Q-66006-R, Oct. 21, Gen. Services Adm., Fed. Supply Service, National Buying Div., 7th & D Sts., S. W., Washington 25, D. C.

Ethylene glycol, 2,322 gals., rust-inhibited, for period from Nov. 1, 1955 through Oct. 31, 1956; Oct. 14, Atomic Energy Commission, P.O.B. 909, Paducah, Ky.

Paint, 5,300 gals. in 55-gal. steel drms. thinner, mineral spirits, petroleum distillate, grade 1, inv. 55 Oct. 17, Norton AFB, Contracting Officer, Calif.; 35,000 lbs. heat-set varnish, suitable for use as an ingredient in the manufacture of printing inks, sch. 3-HS, Oct. 26, Treasury Dept., Bureau of Engraving & Printing, 14th & C Sts., S. W., Washington 25, D. C.; 48,648 qts. Aircraft, gloss enamel, Topeka AF Depot, inv. 383-336, Oct. 28, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Polyhydric alcohol, 2,400 lbs., inv. 2821, Oct. 14, Government Printing Office, Purchasing Agent, Washington 25, D. C.

Potassium chromate, 6,140 lbs., crystals, commercial grade; 2,900 lbs. yellow crystals, commercial grade, East & West Coast, inv. 383-319, Oct. 28, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Witco Names Dale Strasser Materials Handling Engineer

The appointment of Dale Strasser as materials handling engineer for Witco Chemical Company, New York, has been announced by Harry M. Brubaker, Witco rubber chemicals vice-president. In his new capacity in the rubber chemicals department in Akron, Ohio, Mr. Strasser will be available to rubber, ink and other industries for consultation of problems relating to carbon black packaging, storage and transportation.

Mr. Strasser was formerly on the staff of the Witco-associated Continental Carbon Company in Amarillo, Tex., where he was responsible for enginering details of carbon black packaging, unit loading and shipping as well as pilot plants and production. Prior to joining Continental Carbon in 1950, Mr. Strasser was employed as pilot plant engineer of Texas Company's laboratory at Montebello, Calif.

Dixon Chemical & Research Plans Public Stock Offering

The Securities and Exchange Commission announced last week a statement that Dixon Chemical & Research, Inc., Clifton, N. J., has filed a statement seeking registration of $2,250,000 first mortgage bonds, six percent series, due 1975, and 225,000 shares of one dollar par common stock, to be offered for public sale in units consisting of $500 of debentures and fifty shares of stock.

Dixon was organized under New Jersey law on March 16, 1955, for the primary purpose of engaging in the manufacture and sale of sulfuric acid and, as of June 30, 1955, acquired the business, assets and good will and assumed the liabilities of Dixon Chemicals, Inc., which was principally a selling organization engaged in the resale of sulfuric acid and other heavy chemicals purchased from manufacturers. Dixon is not presently engaged in the manufacture of any chemicals, but proposes to construct and operate a plant for the production of sulfuric acid. Proceeds of the financing, estimated at $2,215,000, are to be used for the purchase of land and site improvements ($180,000), construction of the plant ($1,500,000), and acquisition of Dixon Chemicals ($25,000); and $100,000 will be used for interest during construction and $410,000 for working capital.

Officers and directors of the company, headed by Arthur W. Dixon, jr., president, together with the underwriters, have or will acquire 250,000 common shares at $1 per share. This will constitute 52.6 percent of the outstanding voting power, assuming the sale of all the units.

Fertilizer Funds Allotted For Indonesian Purchases

Indonesia has been allotted $35,000 of federal funds by the International Cooperation Administration for the purchase of fertilizers, it has been announced. Purchases will be made on a world-wide basis under procurement authorization PIO/C No. 97-11-004-5-50229.

The Emergency Procurement Service of the General Services Administration will handle the procurement for Indonesia. Purchases will consist of $22,000 of nitrogenous fertilizers and $13,000 of phosphate and other fertilizer materials. The date for receipt of bids will be announced later.

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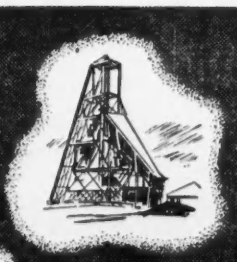

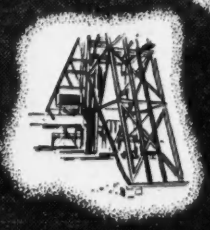

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Federation of Paint and Varnish Production Clubs

Thirty-Third Annual Meeting, New York, October 3-5

Clyde L. Smith of Vi-Cly Industries, Inc., Los Angeles, was installed as the new president of the Federation of Paint and Varnish Production Clubs at its thirty-third annual meeting last week in the Statler hotel, New York. He succeeded Dr. Newell P. Beckwith of the Rinshed-Mason Company, Detroit, Mich., who served as federation president during the 1954-55 term.

Milton A. Glaser of Midland Industrial Finishes, Inc., Waukegan, Ill., was named

Clyde L. Smith
Federation's New President

treasurer of the organization in 1953-54 and 1954-55, will automatically succeed to the presidency at the 1956 convention. president-elect of the federation for the coming year. Mr. Glaser, who served as

Howard G. Sholl of C. M. Athey Paint Company, Baltimore, Md., was elected to a one-year term as treasurer, while C. Homer Flynn was continued as executive secretary of the federation.

The George B. Heckle award was won by Edgar W. Fasig of Lowe Brothers Company, Dayton, Ohio. Mr. Fasig was president of the federation in 1922, the year of its founding.

First prize for the best presentation of a technical paper went to E. G. Shur of the New York Club. Mr. Shur is with the finishes division of Interchemical Corporation, Elizabeth, N. J. A New York Club member also won the third prize. He is S. Leonard Davidson of the National Lead Company, Perth Amboy, N. J. Second prize went to Harry J. Rindfleisch of Trail Chemical Company, El Monte, Calif., a member of the Los Angeles Club.

The Ernest T. Trigg award, made annually to the club secretary for the best-kept minutes, was presented to V. A. Niewrzel of the Waggener Paint Company, Kansas City, Mo., secretary of the Kansas City Club. The Chicago Club won the Toronto golf trophy this year.

Attitude of Inventor Described

The attitude of the inventor was described for the federation by its convention keynoter, Dr. Charles F. Kettering, retired head of the research laboratories division of General Motors Corporation, Detroit, Mich., and now director of the C. F. Kettering Foundation.

While people are generally interested in where they have come from and where they are now, Dr. Kettering said, the inventor is interested in where he is going. Man, he declared, has a residence in place, but no man can have a residence in time. He must always look to the future. Dr. Kettering reviewed his experiences of many years ago in his first contacts with the paint industry on fast-drying lacquer finishes for automotive work.

With respect to the weathering of paint films, he reported that work done in his laboratories had uncovered the mechanism of abnormal oxidation of paint films. This was found to be due not to any energy lift, as such, but to a photochemical reaction. In the presence of an oxide, such as zinc oxide, and moisture, such as that condensed on the surface in dew formation, he explained, the oxygen in the air is decomposed, one atom forming hydrogen peroxide with the water on the surface, and the other atom attacking the paint film. Later the peroxide atom is also released to further attack the paint film, in abnormal oxidation.

Federation Praised for Research

Dr. Kettering congratulated the members of the federation on the scientific progress they have made in the paint industry, and asserted that industry advances through a double profit system. First, there must be a reasonable profit for the manufacturer in producing the product, and secondly, there is a still much greater profit to the consumer in the use of the product. This latter consumer profit, he stated, is measured by asking the question:—"What is it worth to you, and how much more is it worth, if you could not get another?"

At a panel discussion evaluating the various latex paint systems, which took the form of a question-and-answer session, it was stated that acrylic, butadiene-styrene and polyvinyl acetate latex paint systems are mildly competitive. However, it was pointed out that, in reality, each is seeking its own level.

The highest priced latex or emulsion vehicle of the three systems is the acrylic type normally. However, at the panel discussion, it was announced that the price of acrylic emulsion had been reduced 1 cent per pound, the third such price cut in the last twelve months.

Effect of Inert Pigments

A question was asked as to the effect of inert pigments on the tint retention of latex paint systems, as compared with the effect of the same inert extenders in oil-based paint systems. The general feeling of the panel of experts was that the overall relationship with respect to tint retention is the same in latex paints as in oil paints. The highest critical pigment volume concentration in either oil or latex provides the best tint retention.

Some felt that the poorer binding and greater tendency toward erosion of latex paints results in greater color fading of latex systems as compared with oil paints. This point was not agreed to by certain other members of the panel.

With respect to tinting polyvinyl acetate paints, the best recommendations were that they be tinted with colors dispersed in dispersion and wetting agents prior to mixing into the batch. Dry grinding of the pigments into the formulation was not recommended because of the tendency for the pigments to flocculate.

To correct pigment flocculation in a

Milton A. Glaser
President-Elect

batch of latex paint, the best recommendation was that to a hundred-gallon batch, there be added four pounds of an ethylene oxide type of dispersant, and four pounds of a wetting agent such as a 75 percent solution of "Aerosol OT." With such an addition, it was said, a 90 percent flocculation correction can be accomplished with good agitation, and a 100 percent correction accomplished with one pass over the mill.

Regarding sheen non-uniformity, in latex paint systems, this was felt to be

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primarily inherent in the formulation itself, rather than in the effect of overbrushing. It was noted that latex paints have a perceptible non-uniformity of sheen, even in a draw down film. As for overall sheen in latex finishes, this is most affected by pigment particle size and the thixotropic nature of the latex used.

Package life of the commercially produced latex finishes was said to be two to two and a half years, regardless of type, and laboratory and production batches have been found stable for five years or more. Durability of polyvinyl acetate paints on two downtown Los Angeles masonry buildings was said to be good, with only mild chalking in five years.

Panel Participants Named

The panel, moderated by B. Farber of Farnow, Inc., Long Island City, N. Y., included the following participants:—G. Allyn of Rohm & Haas Company, Philadelphia; J. C. Becker, jr., of Celanese Corporation of America, New York; F. H. Foxlee of Bakelite Company, New York; L. J. Horan of National Starch Products, Inc., New York; W. Parle of the California Ink Company, Berkeley, Calif.; F. K. Quigley, jr., of the Dow Chemical Company, Midland, Mich.; E. C. Scholl of Esco Laboratories, and F. B. Steig, jr., of Titanium Pigment Corporation, New York.

Separation of the federation's convention from that of the National Paint, Varnish and Lacquer Association, with different sites and different times, implies no separation of objective for the good of the paint industry, it was declared by Joseph F. Battley, president of NPVLA.

Technical Paint Advances Hailed

Congratulating the technical men in the industry on the scientific progress which they have to date contributed to the paint industry, he said that the greatest challenge of the future to the entire industry hinges on research and continued technical progress. Greater technical progress than ever before is needed, he said, in order to preserve the billion and a half dollar industry that is now represented in paint. In addition, he stated, progress must be made against the odds of competition of other industries for the consumer's dollar and the competitive threat of plastic and steel wall coverings.

However, the great burden of Mr. Battley's message to the federation members concerned the lack of technically trained men coming out of our colleges in the immediate future, and more particularly the siphoning of these technically trained men into the paint industry. He held that future progress of the industry is dependent on the technical men it receives from colleges and suggestd that this serious question be considered very carefully by the federation.

With respect to the federation's educational fund, Mr. Battley urged that the federation consider in its appropriation of funds, a program beginning at the secondary school level and carrying throughout college, a proposed concerted effort directed at attracting technically trained personnel into the paint industry.

In these modern times, Mr. Battley said, no nation can hope to survive without technical progress. He said the paint industry is now faced with a competition for technical personnel that is keener than the competition for sales. Sponsoring the training of technical men and siphoning them into the paint industry is currently a greater need, he said, than is the need for research programs.

European Paint Research

In a discussion of European paint research, Dr. H. W. Talen, director of the Paint Research Institute, T. N. O., Rijwijk, Z. H., Netherlands, described in considerable detail the cooperative activities of the various paint trade associations in Europe. He pointed out that these organizations function at both the technical and at the management and manufacturers level.

The Federation of Associations of Paint, Varnish, Lacquers and Printing Ink Chemists of Continental Europe, he said, was formed in 1949. Its original membership was made up of members of Belgian, French, Italian, Dutch and Swiss paint trade associations. West German and Spanish paint chemists entered at a later date.

A loosely knit triple alliance between the Federation of Paint and Varnish Production Clubs in the United States, the British Oil and Colour Chemists Association and the French Association of Paint Technicians, Dr. Talen continued, had previously been in existence, formed under the guiding hand of the late Joseph J. Mattiello.

The French association, he indicated, gave up what might have been regarded as a dominant position, and became a FATIPEC member. The British OCCA did not do so, he went on, because of the long history of that organization and its affiliations throughout the dominions.

Sweden, Denmark, Norway and Finland, Dr. Talen reported, have not as yet become members of FATIPEC, but are welcome at the meetings and friendly relations are maintained.

Relationship of FPVPC and OCCA

The Federation of Paint and Varnish Production Clubs and the British OCCA maintain a loose alliance with the European organization and always send representatives to their biennial congresses, which, the speaker felt, is the most important function of this international organization. So far three congresses have been held, each on a general theme:—

- In Paris, France, 1951. "Paints as Protectives Against Fire."
- In Noordwijk, Holland, 1953. "The Physical Examination of Paints With Respect to Their Performance."
- In Spa, Belgium, 1955. "The Practical and Theoretical Aspects of Colour Matching."

The next congress of these international autonomous clubs will be held in Switzerland in 1957, and the theme will be "Modern Binders."

Following the example of FATIPEC, the presidents of some twelve or fifteen European national manufacturers associations have formed a committee which exchanges data and information of general benefit, he reported. This committee is formed from the associations in Austria, Belgium, Denmark, Finland, France, Western Germany, Italy, the Netherlands, Portugal, Spain, Sweden and Switzerland. At present, England, Ireland and Norway do not participate.

Paint Output Per Capita

The yearly paint production per head of population, Dr. Talen said has been determined as follows:—

	Kg/per head/per year
Great Britain	9.4
Sweden	8.6
Netherlands	7.0
Belgium	6.5
France	5.8
Denmark	5.7
Norway	5.7
West Germany	5.0
Other fifteen countries	5.0

The corresponding figure for the United States is between 15 and 20 kg/per head/per year.

In Holland, the speaker continued, 1954 paint production amounted to 78,000,000 kilograms worth some 141,000,000 guilders. Of this amount, some 11,000,000 kg. were exported at a value of some 25,000,000 guilders. There are 160 paint factories in Holland employing about 5,500 people.

While much research is done by raw material suppliers, Dr. Talen indicated, most countries also maintain a government subsidized national paint research laboratory. In England, he said, the Paint Research Station has been in existence since 1926. In Switzerland, there is the Federal Institute for Testing Materials, at Zurich. France has its Laboratories of Research on Paints and Varnishes, which was founded during the last war. After the war, Western Germany found its Forschungs-institut fur Pigmente und Lacke at Stuttgart. Sweden also has founded a paint research institute. There is one at Copenhagen, Denmark. Belgium recently started such an institute.

In Holland, Dr. Talen concluded, he is the director of the Dutch paint research institute known as Toegepast Natuurwetenschappelijk Onderzoek, which translated means essentially, "Applied Scientific Research."

Raymond Tooke, jr., of the Georgia Institute of Technology Engineering Experi-

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Dr. Newell P. Beckwith

Retiring FPVPC President

ment Station, discussed "Physical Studies of Paint Systems Applied to Southern Yellow Pine." This paper was sponsored jointly by the Southern Paint and Varnish Production Club and the experiment station.

The high resin saturation of southern yellow pine, Mr. Tooke said, has always caused serious paint problems, particularly from a peeling standpoint. These he described as difficulties experienced with adhesion of the paint to the wood and problems growing out of resinous exudation. Yet, it was pointed out, southern yellow pine is widely used in construction in the south. Therefore, he asserted, research on durable painting systems is important.

Accordingly, Mr. Tooke continued, for this study, the recommendations of various paint authorities, together with the best primers and paint systems which previous researcher work had developed, were evaluated in an extensive exposure program. The results of this study, he said, were aimed at providing an experimental review of technical progress to date and at giving comparative data on the painting of southern yellow pine. The speaker felt the findings should also serve as a good starting point for further research on the subject.

Ten Primers, Fifteen Primers Prepared

A series of ten primers and fifteen topcoats were prepared, it was pointed out. These paints were exposed in every possible combination of two coat systems, yielding 150 systems in all to be exposed and evaluated. Experimental batches of paint were used, made up in approximately one-gallon lots. To eliminate variables, from a raw material standpoint, Mr. Tooke explained, only a single brand and lot of any given material was used in making all of the paints.

Single primer-topcoat systems were applied to panels consisting of six boards of selected No. 105 pattern southern yellow pine siding, six inches wide and four feet long, the back of the panels being given a heavy coat of aluminum paint. The moisture content of the panels was controlled at approximately 12 percent at time of paint application. Exposures were made at the Georgia Tech paint testing station about ten miles north of Atlanta.

Panels were observed and rated for general appearance, gloss, chalking, dirt collection (and mildew), checking, cracking, and flaking, the speaker went on. A numerical record of performance on the points were kept, and in addition the panels were photographed at the end of two, three and four years of exposure.

General Observations

Over and above the specific conclusions, which consist of the numerical rating of the paints tested, Mr. Tooke made the following pertinent general observations:—

A single primer-topcoat system is more durable than three unreduced coats of the topcoat paint only. Paint applied by spray appeared to give better freedom for cracking at corners and sharp edges in the first couple years of exposure, but proved to be definitely inferior to brush applied paint in the third and fourth year.

The more critical factor in two coat paint systems appears to be primers. Reactive pigmentation is essential in primers, and it may consist of lead or zinc, or a combination of both. White lead in oil has not been exceeded as a primer formulation. Resins have not appeared to be helpful in primer formulations.

In topcoats, it appears desirable to retard chalking a bit by the use of some semi-chalking or rutile titanium dioxide in the pigmentation. This also appears to enhance resistance to cracking. Leaded zinc oxide seems to have particular merit as a reactive pigmentation, and basic silicate white lead is of definite interest.

In TT-P-102, straight basic lead sulfate cane be recommended. Also in TT-P-102, a vehicle containing 4.25 pounds of total oil per gallon is preferable to one containing either 4.75 pounds or 3.75 pounds. A higher percentage of bodied oil than the specification allows is preferable in both TT-P-102 and TT-P-103. A high acid number in the vehicle is not detrimental. Chemically modified oils may be undesirable.

The current test program, Mr. Tooke felt, definitely shows that well designed and formulated paints, properly applied, are capable of giving four or more years of satisfactory service on southern yellow pine.

Oxidation Rate of Linseed Oil

Haj Uyehara of Occidental College, in a paper sponsored by the Los Angeles Paint and Varnish Production Club, discussed the "Oxidation Rate of Linseed Oil Under the Influence of Catalysts and Temperature."

The esters of fatty acids constituting linseed oil, he said, occur in the following average percentages:—Saturated esters, 10 percent; oleates, 22 percent; linoleates, 17 percent, and linolenates, 51 percent. Tests were run on one gram lots of linseed oil with appropriate amounts of cobalt, manganese and lead naphthanate driers, singly and in combination, at various temperatures. The oxygen absorption was determined in elaborate apparatus, both volumetrically and gravimetrically.

Drying of Linseed Oil Into Film

The process by which linseed oil dries to a solid film, Mr. Uyehara explained, is felt to occur in four stages—activation, initiation, propagation, and termination.

Activation takes place in the presence of metallic driers which are in a reduced oxidation state. These are potential electron donors and may activate molecular oxygen to form the active diradicals which then initiates the reaction.

Initiation involves attack at the active sites in the triglyceride molecule, and the number of such active sites is always one more than the number of double bonds. It is thought, the speaker said, that the activated diradical attacks the olefin at the carbon atom adjacent to the double bond. Another idea, he added, is that resonance is involved in the reaction.

During the propagation stage of the process, hydroperoxides or their free radicals are continually forming at these active sites. Termination involves the peroxide cross-linkage. This is the principal linkage constituting the dried film, and terminates the overall drying process.

All driers are sluggish in their effect upon the oxidation rate of linseed oil at room temperature of 25°C., Mr. Uyehara stated. However, a rapid rate of oxidation occurs at 45°C. Increased temperature also markedly shortens the induction period, the time required for several cc of oxygen to be absorbed by 1 gram of oil.

Of the single driers promoting the drying of linseed oil, he went on, it was noted that cobalt had the most effective action. Lead had the slowest action. Manganese activity was sharply affected by temperature. Cobalt-lead combinations have an additive effect, while manganese-lead combinations have a subtractive effect.

Stress-Strain Properties of Alkyd Films

"The Influence of Fineness on Grind and Aging of Liquid Paint Upon Stress-Strain Properties of Alkyd Paint Films" was discussed by Dr. Wouter Bosch and

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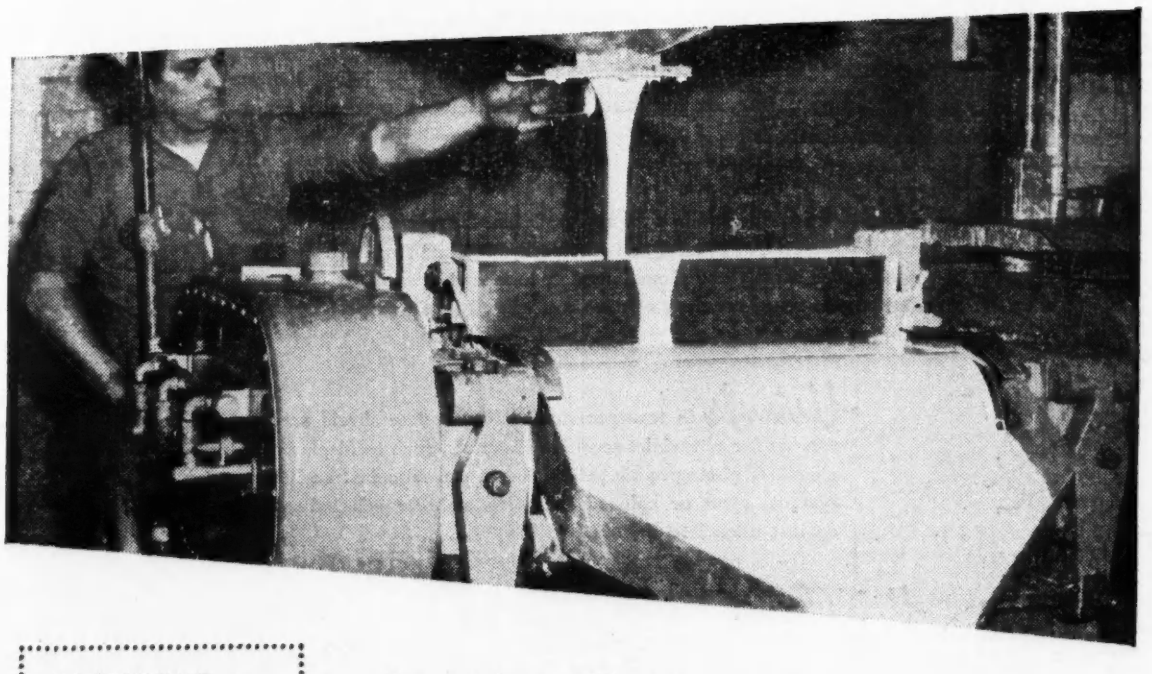

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Henry Y. Yong of North Dakota Agricultural College. The process of grinding in paint manufacture, they pointed out, incorporates pigment into binder in three steps—disintegration, wetting and dispersion.

Disintegration, they explained, has as its object the breaking up of pigment aggregates, rather than actual fracture of pigment particles. Pigment particle size has an important influence on the gloss, color, opacity and durability of paint films.

Wetting occurs when solid and liquid phases come into contact to form a solid-liquid interface, it was indicated. Solid materials practically always have an adsorption of some substances on their surfaces. Pigments usually have air and moisture absorbed on them. In order for the pigment to be wet by the vehicle, the air and moisture on the pigment surface must be replaced by the binder to form a pigment vehicle interface.

How Displacement Process Is Eased

This displacement and wetting process is facilitated by agitation and shearing action which takes place during the mixing and grinding operations. Paint properties affected by the degree to which the pigment is wetted by the vehicle involve such factors as viscosity, pigment settling, flow, leveling and durability.

Dispersion was described as the maintenance of individual pigment particles, or flocculated groups of particles, within a limited size range. Accordingly, the attainment of proper particle size and subsequent wetting precedes dispersion. All three steps are integral parts of the grinding operation. Among the properties of a paint film affected by dispersion are brushability, flow, uniformity, texture and durability.

Paints and Their Tests

Single pigment alkyd resin paints were made up, in which the pigment used was zinc oxide, titanium dioxide and chrome orange. Films were cast from these paints within one-half hour after they had been made up, and also after they had aged for seven, thirty and ninety days. In addition to testing these freshly cast films, tests were made on dried films which in turn had been allowed to age for seven, thirty and ninety days. With each of the three pigments representing different degrees of chemical reactivity, paints were made at a pigment volume concentration of 15 percent, using the same alkyd resin.

Aging of the liquid paints up to thirty days, it was reported, resulted in a slight increase in elongation properties and a small decrease in tensile strength. In testing films that were ninety days old, it was found that fineness of grind has an influence on distensibility properties when the paints are up to seven days old. As the liquid paint ages beyond seven days, the influence of fineness of grind decreases, and there is a greater increase in elongation.

Due to chemical reactivity, the elongation characteristics of the dried paint films decreased on aging, while the tensile strength increased, especially on films cast from fresh paint or from paint aged up to seven days. Films cast from liquid paint that had been aged longer, showed the influence of the age of the dried film to be less important on elongation. Aging the paint had its greatest influence in the period between thirty and ninety days. There was no marked influence noted by the fineness of grind, although there seemed to be an indication that coarse particles gave greater tensile strength.

On this chemically inert pigmented paint, there appeared to be no significant influence on the stress-strain properties of the paint film by either aging the liquid paint or the dried films. The influence of fineness of grind was small and inconsistent.

Materials New to Paint Market Are Listed

The federation's materials committee, under the chairmanship of Harry Burrell of Interchemical Corporation, Cincinnati, Ohio, a member of the CDIC Club, reported that the following raw materials were introduced or commercially developed from April through September of this year:—

Resins

"Epolene E"—Eastman Chemical Products, Inc. Emulsifiable polyethlene.

"Epolene N"—Eastman Chemical Products, Inc. Non-emulsifiable, low molecular weight polyethylene.

"AC-629"—Allied Chemical & Dye Corporation. Emulsifiable polyethylene.

"AC-630"—Allied Chemical & Dye Corporation. Emulsifiable polyethylene, higher melting than "AC-629."

"Rhoplex X-52"—Rohm & Haas Company. Acrylic emulsion producing clear films with low water absorption.

"Rhoplex B-85"—Rohm & Haas Company. Acrylic emulsion of hard resin, produces discontinuous films.

"Polyacrylamide"—American Cyanamid Company. Water soluble thermosetting polymer.

"Acryloid B-66"—Rohm & Haas Company. Solid acrylic resin with good compatibility and solubility.

"Alpex"—Alkydol Laboratories, Inc. Hard, modified rubber hydrocarbon.

"PE-16"—Alfred Hague & Co. Chlorinated natural rubber emulsion.

"Chlorowax 50"—Diamond Alkali Company. Chlorinated paraffin.

"Vinrez 202-P"—Stein, Hall & Co. Polyvinyl acetate emulsion.

"Dyal XRE-1"—Sherwin-Williams Company. Modifying resin for latex type emulsion paints.

"Dyal XMD-C24" — Sherwin-Williams Company. Alkyd resin of an adduct type.

"Dyal XAR-C24" — Sherwin-Williams Company. Resin modified alkyd.

"Dyal XAN-1—Sherwin-Williams Company. Non-drying alkyd.

"Dyal XAD 116"—Sherwin-Williams Company. Drying oil alkyd.

"Cycolac"—Marbon Corporation. High-Impact soluble styrene resin.

"Marbon 11953"—Marbon Corporation. Styrene-butadiene-copolymer.

Additives

"Curing Agent Z"—Shell Chemical Corporation. "Epon" curing agent for high temperature service.

"Curing Agent C-11"—Shell Chemical Corporation. Cures "Epons" at room temperature.

"Curing Agent BF3-400"—Shell Chemical Corporation. Long pot life with "Epon" resins.

"Permagel"—Minerals & Chemicals Corporation of America. Colloidal fuller's earth for thickening and suspending pigments.

"Acrysol G-110"—Rohm & Haas Company. Latex thickener.

"Suspenew"—Jasonols Chemical Corporation. Forms thioxotropic gel structure of strong suspending power.

"Slo-Flo"—Jasonols Chemical Corporation. Dispersing agent in organic solvents.

"Jel"—Jasonols Chemical Corporation. For increased body and suspension of pigments.

"Modicol VD"—Nopco Chemical Company. Modified sodium polyacrylate solution.

"Hi-Sil 233" — Columbia-Southern Chemical Corporation. Hydrated silica paint processing and grinding aid.

Triethyl aniline phosphate—Electric Reduction Sales Company, Ltd. Prevents coloring of shellacs and polishes in contact with metals.

"Superior 3-15"—Superior Metals, Inc. Freeze-thaw stabilizer.

"1-V3, 1-V-4 & 1-V-7"—Harshaw Chemical Company. Barium organic heat and light stabilizers for vinyls.

"Cadmium 2-V-7, 2-V-8" — Harshaw Chemical Company. Alkyl phosphite complex heat and light stabilizers.

"Mark XX"—Argus Chemical Corporation. Extends heat and light stability for vinyls.

"Mark XV"—Argus Chemical Corporation. Cadmium organic liquid provides crystal clarity, heat and light stability.

"Mark E"—Argus Chemical Corporation. Strontium-zinc laurate.

"Mark PL"—Argus Chemical Corporation. Zinc organic liquid stabilizer.

"Mark XI"—Argus Chemical Corporation. Barium-cadmium laurate.

"Mark M"—Argus Chemical Corporation. Barium-cadmium organic liquid.

"Witco Stayrites #71, 75, 76, 95"—Witco Chemical Company. Vinyl stabilizers.

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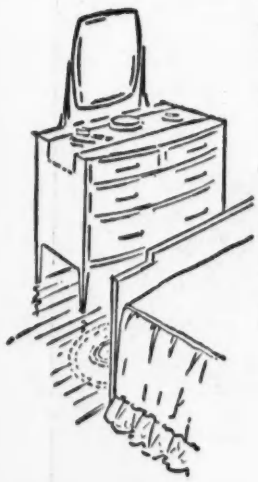

Uvinuls **filter out ultraviolet radiation to permanently protect the substrate, or to stabilize the vehicle or medium from degradation.**

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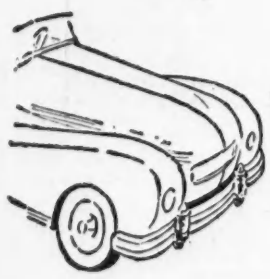
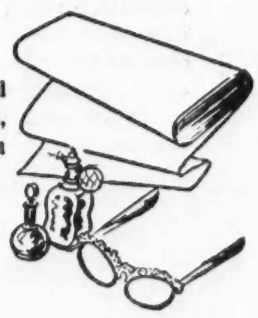


Uvinuls **in polyester resins prevent discoloration and deterioration on long exposure to sunlight. Also in waxes, polishes, oils, creams, aerosols or various film forming products to protect a wide range of substances or surfaces against degradation.**



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"Anti-Foam 60"—General Electric Company. Silicone antifoamer for aqueous solutions.

"Antifoam X-1135"—Dearborn Chemical Company. For use in paint spray booth systems.

"Dow Corning 200, 100cs"—Dow Corning Corporation. Polysiloxane for defoaming varnishes and water-based materials.

"Hallco Defoamers C-369; CPH-4, 9, 30, 42; C-451"—C. P. Hall Company of Illinois. Anti-foam agents.

"Paisley #630 Defoamer"—Paisley Products, Inc. Defoamer for latices.

"Defoamant AD 3163"—Geigy Chemical Corporation. Emulsion of silicone and organic defoamants.

"Napco JMK"—Nopco Chemical Company. Antifoamer.

"Witco DGL"—Witco Chemical Company. Diglycol laurate anti-foam agent.

"Nopco 1525"—Nopco Chemical Company. Ethylene oxide condensate emulsifier.

"Siponic"—American Alcolac Corporation. Ethylene oxide condensate emulsifier.

"Sipex"—American Alcolac Corporation. Fatty alcohol sulfates.

"Monawet MO"—Mona Industries, Inc. Disodium sulfosuccinic acid wetting agent.

"Nonamine"—Mona Industries, Inc. Alkylolamide rust retarding wetting agent.

"Rosanol"—Jasonols Chemical Corporation. Anionic surfactant.

"Napalcol 6-LW"—Nopco Chemical Company. Dispersing agent for pigments normally employed in polyvinyl acetate systems.

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"Hallco CPH-30,CPH-42" — C. P. Hall Company of Illinois. Anti-static agents.

"Dow Corning 129G"—Dow Corning Corporation. Polysiloxane water repellent additive for oil and cement gase paints.

Dow Corning XS-1 and XS-2"—Dow Corning Corporation. Sodium salts of polysiloxanes.

"Odormasque"—Polak & Schwartz, Inc. Odorant, deodorant.

"Maskit #2"—Aromatic Products, Inc. Oily liquid, pleasant odor.

"Vandor 207"—van Ameringen-Haebler, Inc. Deodorant for mineral spirits.

"Vandor 16"—van Ameringen-Haebler, Inc. Deodorant for alkyd type and latex paints.

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Isosebacic acid—U. S. Industrial Chemicals Company. Sebacic acid replacement.

Dimethyl and dibutyl itaconate—Chas. Pfizer & Co. Vinyl monomers.

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"Amsco LEP solvent"—American Mineral Spirits Company. A low odor Stoddard solvent.

"Pentasol 258"—Sharples Chemicals, Inc. An alcohol blend superior to n-butanol in both viscosity and blush resistance.

"Celluflex CEF"—Celanese Corporation of America. Flame retarding plasticizer.

"Citroflex A-4"—Chas. Pfizer & Co. Acetyl tributyl citrate, odorless plasticizer.

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Di-iso-decyl phthalate—Ohio-Apex Division. Plasticizer for vinyls and cellulose derivatives.

"Esterflex B-1"—Swift & Co., industrial oil department. General purpose primary plasticizer for PVC.

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"PX-114"—Pittsburgh Coke & Chemical Company. Decyl butyl phthalate plasticizer.

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"Elastex 40-P"—Barrett Division. Butyl isodecyl phthalate plastizer.

Pigments

"Cyan blue toner B-NF-55-3750"—American Cyanamid Company. Red shade phthalocyanine blue toner, resistant to flocculation.

"Cyan blue toner GT-NF-55-3450"—American Cyanamid Company. A green shade phthalocyanine blue toner, resistant to flocculation.

"Accosperse hansa yellow G-46-4053"—American Cyanamid Company. Stabilized, alkali-resistant, aqueous dispersion for latex paints.

"Accosperse toluidine red XL-22-3053"—American Cyanamid Company. Stabilized, alkali-resistant, aqueous dispersion for latex paints.

"Accosperse naphthol scarlet 22-7513"—American Cyanamid Company. Stabilized, alkali-resistant, aqueous dispersion for latex paints.

"Accosperse cyan blue B-56-3653"—American Cyanamid Company. Stabilized, alkali-resistant, aqueous dispersion for latex paints.

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"X-2575 chromium phosphate"—Imperial Paper & Color Corporation. Suggested for use in wash primer to make stable package.

"X-2593 sparta red"—Imperial Paper & Color Corporation. Light mass tone naphthol red with very good alkali and soap resistance.

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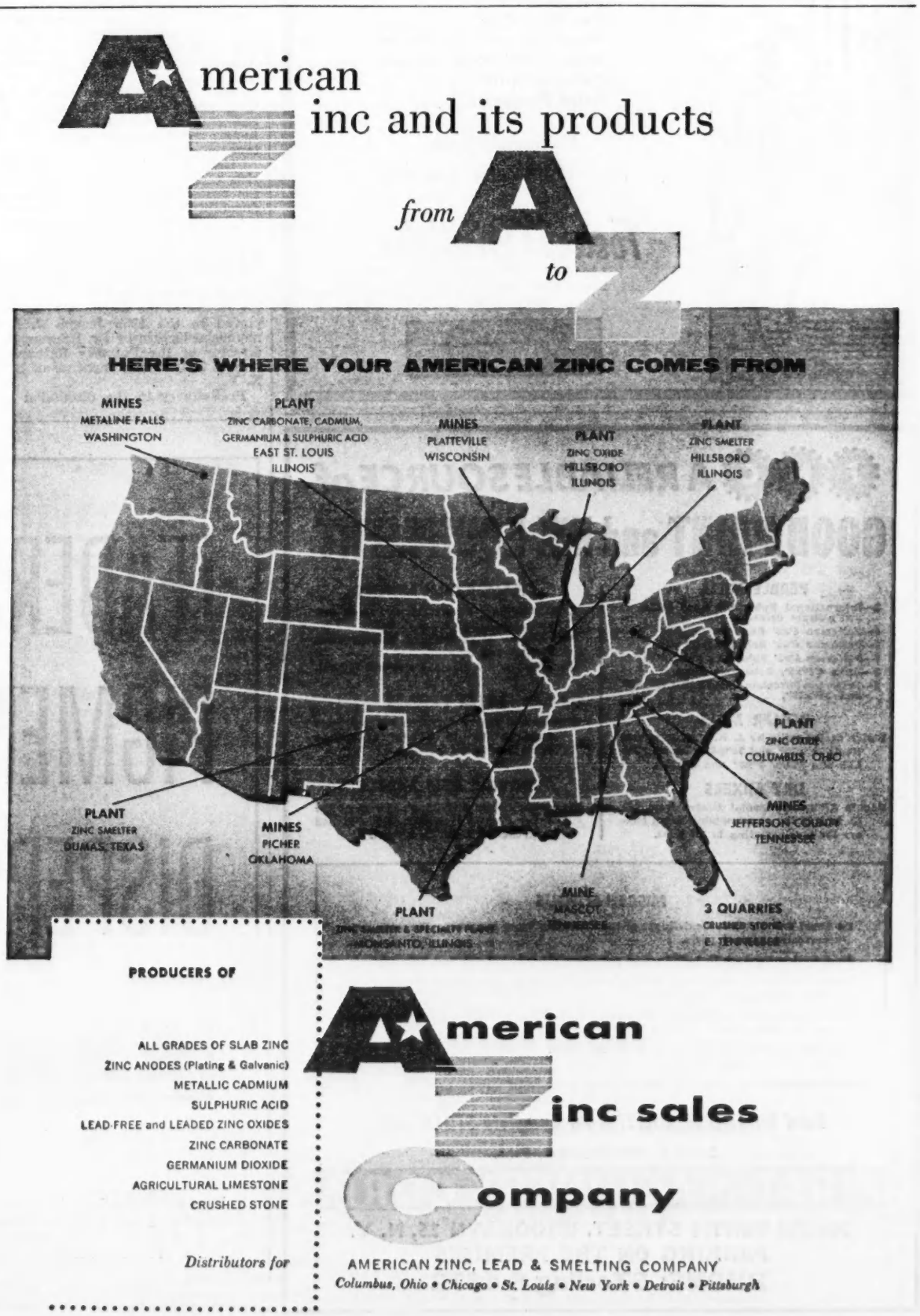
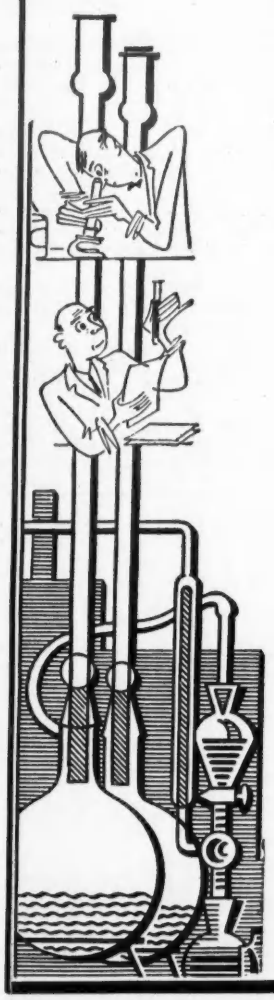
"X-2480 monarch blue toner G"—Imperial Paper & Color Corporation. Pure phthalocyanine blue toner, very clean and greener in hue than regular.

"X-2658 monarch blue NCNF"—Imperial Paper & Color Corporation. Concentrated lake of phthalocyanine blue that





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"CP toluidine toner RT-6155 (Dark)"—B. F. Goodrich Chemical Company. Little color change on grinding, and yields less haze and sharper luster than conventional standards.

"Polyazo red medium R-6284"—B. F. Goodrich Chemical Company. Non-bleeding bright maroon with good hiding and good outdoor durability at full tones.

"Thio fast red MV-6613"—B. F. Goodrich Chemical Company. A darker, more transparent, higher strength MV-6606 type, non-bleeding and excellent outdoor durability.

"Indo red lake E-10315"—B. F. Goodrich Chemical Company. Recommended for pastel shades; possesses excellent outdoor durability.

"Fast indo red lake E-10336"—B. F. Goodrich Chemical Company. Recommended for pastel shades; possesses excellent outdoor durability.

"Fast indo double scarlet lake E-11338"—B. F. Goodrich Chemical Company. Recommended for pastel shade; possesses excellent outdoor durability.

"Fast yellow toner YB-5712"—B. F. Goodrich Chemical Company. Lacquer and enamel type with good opacity and luster; good outdoor durability at full tones.

"Fast yellow toner YB-5716"—B. F. Goodrich Chemical Company. Lacquer and enamel type with good opacity and luster; good outdoor durability at full tones.

"Indo yellow lake #-10313"—B. F. Goodrich Chemical Company. Recommended for pastel shades; has excellent outdoor durability.

"Fast yellow toner YB-5712"—B. F. Goodrich Chemical Company. Lacquer and enamel type with good opacity and luster; good outdoor durability at full tones.

"Fast yellow toner YB-5716"—B. F. Goodrich Chemical Company. Recommended for pastel shades; has excellent outdoor durability.

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"Indo orange lake E-10314"—B. F. Goodrich Chemical Company. Recommended for pastel shades; has excellent outdoor durability.

"Non-flocculating phthalo blue greenish lake B-4791"—B. F. Goodrich Chemical Company. Non-flocculating type. See U. S. Patent 2,327,472.

"Pigment green G-34"—B. F. Goodrich Chemical Company. Pigment green B.

"Indo blue reddish B-75"—B. F. Goodrich Chemical Company. Indanthrone blue.

"Brown gold powder F-5809"—B. F. Goodrich Chemical Company. Recommended for lacquers; composition 67 percent ferric hydrate pigment, 33 percent castor oil #4.

"Metalead bronze"—Metalead Products Corporation. Solvent free metallic lead flakes for corrosion resistant primers.

"No. 96 red oxide"—Clinton Metallic Paint Company. Primer-surfacer pigment, 65-70 percent Fe_2O_3.

"Texas V-2"—Sid Richardson Carbon Company. Densified low dusting, quick dispersing, high tinting carbon black.

"Dow Corning silica"—Dow Corning Corporation. Silica flatting agent and thickener.

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Mattiello Lecturer Discusses Building Blocks

"Graft and Block Copolymers as Building Blocks in the Coatings Field" was explored in the 1955 Joseph J. Mattiello memorial lecture by Dr. Herman F. Mark, director of the Polymer Research Institute of Polytechnic Institute of Brooklyn, N. Y.

Preliminary to the discussion of graft and block type of macromolecular structure, Dr. Mark reviewed the nature of regular alternate or random type of copolymerization. In general, the macromolecular type of compositions used in surface coatings belong to the organic class consisting only of molecules built up of carbon, hydrogen, oxygen, and, in some of

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them, nitrogen. In addition, there are those polymeric materials containing halogens, such as polyviyl chloride, "Neoprene" and chlorinated rubber.

Elements Affect End-Products

Each of these elements and their combinations confer on the final film forming product certain desirable features, and certain undesirable features, Dr. Mark said. Consequently, a good protective coating is always a compromise between basically conflicting properties. Carbon and hydrogen combined in the form of alkyl groups introduces into the film such properties as mechanical suppleness, water repellency, and some stability against the attack of acids and bases. However, any excess of them in the balance with other constituents can lead to low softening, poor adhesion, easy flammability, and excessive swelling in the presence of organic solvents.

Oxygen, chlorine and nitrogen carry with them the phenomena of strong polarity and hydrogen bonding, he continued. For example, the carbon-chlorine bond has a moderately strong dipole which causes relatively high cohesion of the molecules, and good adhesion of the material to polar surfaces and to polarize metal surfaces. The strong internal cohesion leads to a tough film which is resistant to water, chemicals and organic solvents. Vinyl chloride polymers and chlorinated rubber, Dr. Mark indicated, are types which reflect the good properties of chlorine, but, at the same time, such compositions have the disadvantage of excessive brittleness at low temperatures, and of instability at high temperatures and under exposure to oxygen and light.

Formation of Strong Dipoles

Oxygen and nitrogen, when bonded with carbon, can form strong dipoles, such as the keto or cyano groups which can at the same time act as hydrogen bond acceptors, the speaker reported. Or, he added, they can form weak dipoles, such as amino groups which can act as hydrogen bond donors. Weak dipoles with hydrogen bond donor capacity when used alone produce good adhesion, good solvent resistance, high melting point and toughness, but excessive swelling and even solubility in water are other results.

Hence, by combining into film forming compositions strong hydrogen bond accepting and weak hydrogen bond donating dipoles, such as in CO and OH or CO and NH, in proper concentrations, it is possible, Dr. Mark stated, to combine high softening and good solvent resistance with good adhesion and mechanical properties at moderate curing temperatures. As examples of such combinations he cited polyamides, copolyester-polyamides, polyester-epoxy, and similar materials. Yet, it was noted, certain desirable properties are still lacking and disadvantages such as brittleness at low tempertaures are present.

Effect of Inorganic Structural Atoms

Introduction of fluorine and of silicon into the architecture of the polymer leads to the attainment of certain very desirable properties such as increased resistance to temperature fluctuations, high degrees of chemical resistance, etc., the speaker went on. Polychlorofluroethylene and polyvinylfluoride and the fluorinated polyacrylates were cited as examples of the use of fluorine. The many silicone resins, he said, are examples of incorporating silicon into the polymeric structure through silicone monomers. There are many new applications of polysiloxenes in the surface coating field. Use of phosphorus is under experimental study, but is handicapped by the fact that the carbon-oxygen-phosphorus bond is rather easily hydrolyzed. Organic titanium cross-linking and curing agents have in recent years been introduced into polymeric structures. They impart greater flame resistance, crease resistance, and higher softening characteristic.

In regular copolymerization reactions with both monomers present, the copolymerization takes place either alternately or at close random, like ABABABAB or ABBAAABABB combinations.

What New Principles Involve

New principles involve the production of either "block" or "graft" molecular structure at the same composition ratios and degree of polymerization, it was pointed out. Block macrolecular structures are those in which long chain molecules have a series of polymerized monomer of one kind, separated by a series of polymerized monomer of the other kind, in the same chain. As contrasted to the A and B combinations cited above, a block structure would consist of a molecule having perhaps fifty atoms of monomer A spaced by another fifty atoms of monomer B, such as 50A—50B—50A—50B, etc., instead of the alternate or random type that occurs in regular copolymerization as cited above.

The other type is graft polymerization, in which the axial chain of the molecule is composed of one monomer, and branching from it at regular intervals are side chains of monomer B, in the macromolecular structure. The average distance between the chains can be varied and the average length of the chain can be regulated, without varying the 1:1 molar ratio of the monomers or the total degree of polymerization.

The syntheses of block or graft macromolecules in copolymeric structures, Dr. Mark asserted, offers almost unlimited combinations of properties, particularly with respect to adhesion, and surface activity or passivity. Graft copolymers of polyesters, alkyds, and epoxy resins and rubbers exhibit very interesting laminating characteristics and are one of the most rapidly expanding species of constructional plastics. In order to facilitate the grafting reaction and to improve the yield of the chains with chemically affixed branches, one employs in the backbone chain of the polyester or polyether components which are particularly sensitive as points of attack for chain transfer processes, and uses as second component, not just one monomer such as styrene, but a mixture of two or more, in such a manner that one of them reacts specifically with the prospective chain transfer positions.

Nuclear Radiation in High Polymers

Nuclear radiation of organic polymers, the speaker said, produces a variety of free radicals in the polymer or copolymer which set off three different types of secondary reactions:—

1. Chemical cross-linking of adjacent chains.

2. Establishment of double bonds in the individual chains.

3. Scission of the individual chains.

Such radiations have very interesting effects on certain macromolecular structures. For example, he said, polyethylene which normally has a melting point of around 110°C, can be made to melt only above 130°C and become insoluble in all solvents even at elevated temperatures. Similar effects can be accomplished with polystyrene. Substantial improvement in plastic properties can be affected an certain films, fabrics, or plastic objects, such as bottles, for as litle cost as 8 cents per pound.

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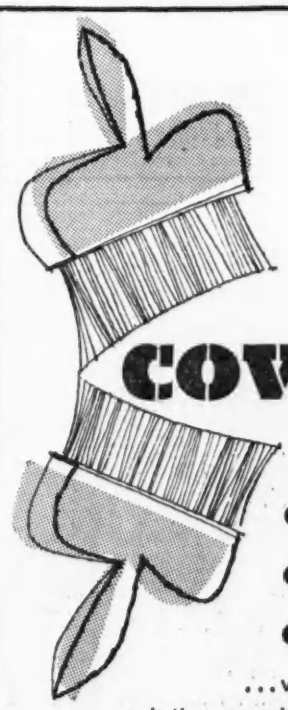

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Paint Show Features Products, Equipment

New developments in protective coatings materials and equipment featured the Paint Industries' Show, which was held in conjunction with last week's federation convention.

Paul O. Abbe, Inc., Little Falls, N. J., exhibited models of its line of ball and pebble mills and mixers, and also showed some operating laboratory mills. Troy Engine & Machine Company, Troy, Pa., at its booth featured both the Troy sixty- and five-gallon angular mixers.

Cuno Engineering Corporation, Meriden, Conn., presented its full line of filtering and straining devices for industrial and automotive paint products. Patterson Foundry & Machine Company, East Liverpool, Ohio, displayed its "Jet Mill," a high-speed dispersion unit capable of rapid wetting and the reduction of pigment agglomerates; an operating scale model of a re-designed ball and pebble mill, the portable "Typhoon Mixer"; a scale model of a complete synthesizing plant, and Patterson "Arclite," a high density material for mill lings and grinding balls.

New Three Roller Mill Shown

Kent Machine Works, Inc., Brooklyn, N. Y., showed the latest design high speed three roller mill in its line, featuring the "Controlled Floating Roll." The plastics division of Celanese Corporation of America, Newark, N. J., exhibited transparencies and charts showing claimed advantages of its PVAC emulsions for paints.

Atlas Electric Devices Company, Chicago, had on display its model DMC "Twin Arc Weather-Ometer" for conducting weathering tests on paint, varnish and related products. Hercules Filter Corporation, Hawthorne, N. J., featured a working model of its "Pressure Leaf Filter." Bennett Industries, Inc., Peotone, Ill., in its exhibit presented a picture story of the manufacturing of steel pails.

C. M. Ambrose Company, Seattle, Wash., displayed its model PF9 filling and closing machine and its model PSM-2 self-cleaning strainer. J. H. Day Company, Cincinnati, Ohio, division of the Cleveland Automatic Machine Company, showed a new design gearless pony mixer with twin motion agitator head.

Kinetic Dispersion Corporation, Buffalo, N. Y., exhibited all its production models and its "Kady" laboratory model. Macbeth Daylighting Corporation, Newburgh, N. Y., featured its complete line of industrial color control equipment. C. K. Williams & Co., East St. Louis, Ill., had a series of panels illustrating iron oxide pigments in shop coat primers, gloss enamels and PVA paints.

Horizontal Plate Varnish Filter

Sparkler Manufacturing Company, Mundelein, Ill., displayed its model 18-15 horizontal plate varnish filter. Catalytic Combustion Corporation, Detroit, Mich., showed ventilation systems for cooking kettles with platinum catalyst elements, used to convert fumes to odorless and colorless gases.

Troy Chemical Company, New York, featured its full line of additives and specialties. The exhibit of Carbola Chemical Company, Natural Bridge, N. Y., included a history of the firm along with pictures of its manufacturing facilities. Charles Ross & Son Company, Brooklyn, N. Y., featured an exhibit of mixers and mills for processing liquid, paste and dry materials.

National Aniline Division of Allied Chemical & Dye Corporation, New York, displayed a number of paint, varnish and lacquer raw materials including dicarboxylic anhydrides, anti-skinning agents, isocyanates and detergents. Pacific Vegetable Oil Corporation, San Francisco, exhibited all drying oils of interest to the protective coatings industry.

Morehouse-Cowles, Inc., Los Angeles, featured mills and dissolvers designed for coatings manufacture. U. S. Stoneware Company, Akron, Ohio, displayed a line of jar mills, porcelain ball mills and mill jars. Epworth Manufacturing Company, Detroit, Mich., showed photos and models of major paint processing machinery.

Herman Hockmeyer & Co., New York, featured a two-fold exhibit containing a sixty-gallon "pony paste mixer" and a variable speed post mixer. Thibaut & Walker Company, Newark, N. J., displayed an alkyd resin system lowering inventory to three base alkyds for a complete line of paints. Cambridge Industries Company, Cambridge, Mass., exhibited plasticizers for polyvinyl acetate paints.

J. M. Lehmann Company, Lyndhurst, N. J., featured demonstrations of new sieving and straining machines. Pennsylvania Industrial Chemical Corporation, Clairton, Pa., displayed its complete line of hydrocarbon resins, plasticizing oils and resins, and petroleum aromatic solvents. A tall oil information center was sponsored by members of the Tall Oil Division of the Pulp Chemicals Association.

Rheem Manufacturing Company, Chicago, exhibited its line of drums and pails. Instrument Development Laboratories, Inc., Needham Heights, Mass., displayed an abridged spectrophotometer for color determination, grading and comparison.

Commercial Solvents Corporation, New York, featured the role of nitroparaffins and derivatives as specialty solvents in protective coating fields. Siberline Manufacturing Company, Stamford, Conn., exhibited the finishes of all grades of aluminum pastes on tall pillars to show contrasts of the products.

DeVilbiss Company, Toledo, Ohio, showed and explained its contributions to material application. Precision Scientific Company, Chicago, displayed its equipment by use of color photography. Farnow, Inc., Long Island City, N. Y., exhibited a line of flat alkyd paints.

Lacquer Information Center Sponsors

A lacquer information center was sponsored by Antara Chemicals Division of General Aniline & Film Corporation, New York; Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation, New York; Davison Chemical Company, Baltimore, Md., a division of W. R. Grace & Co.; Enjay Company, New York; Hercules Powder Company, Wilmington, Del., Ohio-Apex Division of Food Machinery & Chemical Corporation, Nitro, W. Va.; Olin Mathieson Chemical Corporation, New York; Shell Chemical Corporation, New York, and C. K. Williams & Co., E. St. Louis, Ill.

Dow Chemical Company, Midland, Mich., featured latex for exterior and interior paint, as well as resins, vinyltoluene and styrene, and glycerine. Mineral Pigments Corporation, Muirkirk, Md., exhibited natural and synthetic iron oxides, chrome colors, organic pigments and pulp colors.

Firestone Plastics Company, Pottstown, Pa., displayed vinyl resins and paint latexes. Heyden Chemical Corporation, New York, featured pentaerythritol and trimethylolethane. Colton Chemical Company, Cleveland, Ohio, exhibited a new paint dispersion. Atlas Powder Company, Wilmington, Del., displayed sorbitol for synthesis of resins, as well as non-ionic emulsions.

Cargill, Inc., Minneapolis, Minn., exhibited products from its complete line of linseed oils, soybean oils, alkyd resins, and a new paint vehicle. E. I. dePont de Nemours & Co., Wilmington, Del., displayed polyvinyl acetate emulsions for exterior and interior use.

Thixotropic Vehicles Exhibited

T. F. Washburn Company, Chicago, displayed thixotropic vehicles. National Starch Products, Inc., Plainfield, N. J., featured the advantages of copolymers for paint use. Metals Disintegrating Company, Elizabeth, N. J., showed sales service laboratory test equipment. Bakelite Company, New York, a division of Union Carbide & Carbon Corporation, displayed eight sample panels of phenolic and vinyl systems.

Godfrey L. Cabot, Inc., Boston, exhibited wallastonite and carbon blacks. Goodyear Tire & Rubber Company, Akron, Ohio, displayed resins for masonry finishes and maintenance paints. Witco Chemical Company, New York, showed its line of driers, carbon blacks, plasticizers and extenders. Heckel Publishing Company, Philadelphia, displayed a number of trade publications.

Buckman Laboratories, Inc., Memphis, Tenn., showed panels and photographs of oil-base and polyvinyl acetate paints. Reichhold Chemicals, Inc., White Plains, N. Y., displayed the company's new polyvinyl acetate emulsion and isophthalic alkyd lines. Harshaw Chemical Company, Cleveland, Ohio, exhibited a broad line of products for the paint and varnish industry.

Eastman Chemical Products, Inc., Kingsport, Tenn., a division of Eastman Kodak Company, featured information on half-second butyrate. Naftone, Inc., New York, devoted its space to naphthenate driers. Barrett Division of Allied Chemi-

—Continued on page 78

Technical papers presented by affiliated clubs at last week's federation convention will appear in the November 7th OPD, in conjunction with this paper's special report on the sixty-seventh annual meeting of the National Paint, Varnish and Lacquer Association in Washington, D. C.

Protective Coatings Materials

Price advances for chrome greens, oranges and yellows were announced, to take effect November 1. Recent increases in bichromate, pig lead and other raw materials were said to be the causing factors. The advances were 1 cent and 1½ cent per pound for oranges and yellows, depending upon maker, and 1 cent per pound for chrome green. Zinc yellow advances of 1 cent and 1½ cent were announced as part of the firming action.

Other pigment prices were steady and for the most part quite firm. Buying was reported in sizable volume. Orders for titanium dioxide came in briskly. Lead oxides were firm at recently advanced levels. Carbon black usage continued at a good stride, with the material used by tire makers and by the printing ink industry in heavy demand.

The market for alkyd resins firmed as the fall buying season got well under way. Soybean oil continued steady and firm, with heavy export business reported. A reduction was announced by one manufacturer in its acrylic emulsion binder for water base paints. Petroleum hydrocarbon resin sales continued at good volume.

Dioctyl phthalate moved along quite well, with most producers shipping all of their current output. Prices showed no change. Strength was observed in shellac at the source. Dealers in this country, however, did not believe that this advance would prove to be more than fractional. Some, in fact, felt that a 1 cent to 2 cent decline was possible in the weeks ahead. Some recent sales of Siam material were reportedly made too early, and the goods could not be shipped because of a high moisture content.

Offers of casein from the Argentine were limited, because stocks were limited in that country. The start of the flush season there meant, however, that new production would become a factor in the market sometime in the next thirty days. New Zealand material was quite firm.

Price Trends

Advanced

Barytes, southern, water-grd., E. St. Louis, Mo., $3.40 per ton. ex-whse., N. Y., $5 per ton.
Gum, dammar, Singapore No. 1, 1c. per lb.
Lead, white, basic silicate, ¼c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
97.28	97.26	97.25	97.05

(For Current Prices see Page 9)

Prime Pigments

Aluminum Paste, Powder — Prices remained firm and steady as producers shipped in good amounts. The present market was felt to be in a well balanced condition, with demand quite healthy and supplies generally adequate to fill consumer needs. No price changes were expected in the weeks immediately ahead.

Blue, Methyl Violet Toner—One maker advanced its price for its methyl violet base toner by 5c. per pound, effective October 14, bringing this quotation to 60c. per pound. The concentrated pigment itself, both the molybdated and the tungstated varieties, remained steady at previous listings.

Carbon Blacks—The production of carbon black in August, 1955, remained at 151,000,000 pounds, unchanged from the previous month. Shipments of furnace blacks held steady and contact black shipments increased 7,000,000 pounds.

The following figures, in thousands of pounds, indicate production, shipments, stocks, and exports of carbon black for August, 1955, with figures for July, 1955, and August, 1954, reported for comparison.

Production

	Furnace	Contact	Total
August, 1955	120,584	30,141	150,725
July, 1955	120,050	30,466	150,516
August, 1954	84,257	32,000	116,257

Shipments

	Furnace	Contact	Total
August, 1955	110,349	40,330	150,679
July, 1955	110,731	33,228	143,959
August, 1954	72,972	33,719	106,691

Stocks

	Furnace	Contact	Total
August, 1955	127,487	119,105	246,592
July, 1955	117,252	129,294	246,546
August, 1954	166,094	216,786	382,880

Exports

	Furnace	Contact	Total
August, 1955	*	*	*
July, 1955	20,413	15,252	35,665
August, 1954	18,053	16,861	34,914

* Not available.

Chrome Colors—Price advances for chrome greens, oranges and yellows were announced last week to take effect Nov. 1, and were attributed to recent increases in bichromate, pig lead and other raw materials. From one source the advance for chrome yellows and oranges, molybdate oranges, and zinc yellows amounted to 1 cent per pound. Other sources, however, increased their quotations for chrome yellows and oranges, molybdate oranges and zinc yellows by 1½ cent per pound and at the same time moved up chrome green prices 1 cent per pound. Delivery and quantity differentials remained the same in the revised price listings.

Lead Oxides—Material was firm at recently advanced quotations. Sales at the higher prices effected after pig lead advanced were reported good, and manufacturers had expectations of continuing the year at a satisfactory advance over sales figures of 1954. Demand from the paint and automotive industry held its brisk pace, it was noted.

Lead Silicate—A ¼ cent per pound advance for white basic lead silicate announced earlier went into effect October 3. This advance brought the current range for this material to 16¼ cents to 19 cents per pound in carlot purchases, and to 17¼ cents to 20 cents for l.c.l. shipments.

Litharge—Following the firming action of the previous week, which put litharge quotations up ½ cent per pound, the market remained steady and firm. Material moved well, it was reported, to a good overall demand. Supplies were rated as quite adequate for current needs.

Titanium Dioxide—Orders were reported coming in quite briskly by manufacturers, continuing the trend of the past months. At the present rate of interest, all current production went into consuming channels. Indications were that consumption would easily keep up with output in this material over the coming months.

Zinc Oxide—Prices remained steady and firm throughout the week as material moved at a good rate to consumers. The leaded grades were still unaffected by the recent advance in pig lead, which resulted in upward revisions in many lead pigment quotations. Sales of paint products have been good, indicating that consumption of zinc oxides and other prime pigments can be expected to continue at a good clip in the weeks just ahead.

Zinc Yellows—Price advances of 1 cent to 1½ cent per pound were announced last week by major producers, to take effect on November 1. The advances were made as part of the makers' revision of their chrome pigments quotations. Recent advances in raw material costs were cited as the cause of the increase. Volume of demand continues steady at good levels.

Synthetic Resins

Acrylics—A reduction was announced by one manufacturer in its acrylic emulsion binder for water base paints. Sales have been good over the past week, it was noted, and should be at their best levels of the year during the final quarter.

Alkyds—The market firmed as the fall season got underway and makers noted a pickup in sales. Most consumers were expected to maintain a good rate of demand over the coming weeks. The market for soybean oil has continued steady and firm, with heavy export business tending to advance prices fractionally. Refiners have been liberal buyers for future delivery.

Petroleum Hydrocarbons — Manufacturers have reported satisfactory progress in the marketing of these resins. Volume of sales continues to make gains of gradual and steady dimensions. The cost-consciousness of many users continues to be a factor in this expansion, it was noted.

Lacquer Materials

Di-Iso-Octyl Phthalate—Sales have been quite good, according to most makers, who noted that they were moving all of their production at the present. The tightness in phthalic anhydride has been felt in the market for phthalate plasticiz-

For Late Market Developments, See Page 4

for HIGH QUALITY
OHIO-APEX CHEMICALS

CITIES WITH REPRESENTATIVES OF OHIO APEX DIV. THAT CARRY WAREHOUSE STOCKS

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CHICAGO, ILLINOIS — Central Solvents and Chemicals Co.
CINCINNATI, OHIO — Amsco Solvents and Chemicals Co.
CLEVELAND, OHIO—Ohio Solvents and Chemicals Co.
DALLAS, TEXAS—Texas Solvents and Chemicals Co.
DETROIT, MICHIGAN — Western Solvents and Chemicals Co.
FORT WAYNE, INDIANA — Hoosier Solvents and Chemicals Corp.
GRAND RAPIDS, MICHIGAN —Wolverine Solvents and Chemicals Co.
HOUSTON, TEXAS—Texas Solvents and Chemicals Co.
INDIANAPOLIS, INDIANA — Hoosier Solvents and Chemicals Corp.
LOS ANGELES, CALIFORNIA —Ohio-Apex Division, FMC.
LOUISVILLE, KENTUCKY — Dixie Solvents and Chemicals Company.
LYNDHURST, NEW JERSEY—Stoney-Mueller, Inc.
MILWAUKEE, WISCONSIN — Wisconsin Solvents and Chemicals Corp.
MONTREAL, QUEBEC — Canada Colors and Chemicals Ltd.
NEW ORLEANS, LOUISIANA —Southern Solvents and Chemicals Co.
PROVIDENCE, RHODE ISLAND—Philipp Brothers Chemicals Co.
ST. LOUIS, MISSOURI — Missouri Solvents and Chemicals Co.
SAN FRANCISCO, CALIFORNIA—EvanStrom Co.
TORONTO, ONTARIO—Canada Colors and Chemicals Ltd.

Look in the Yellow Page section of your local telephone directory.

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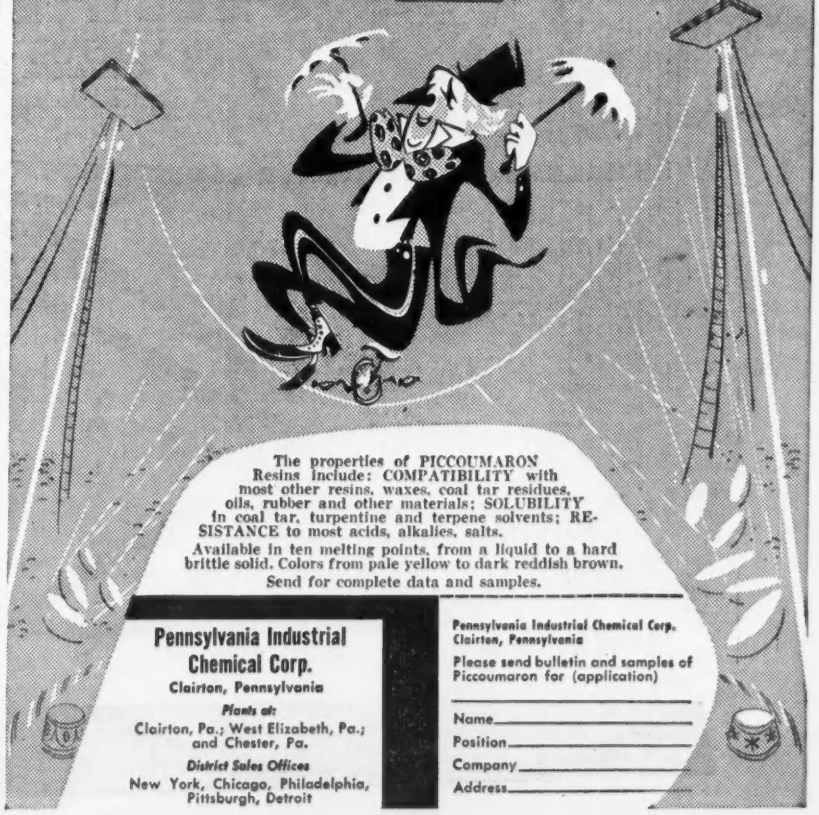

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ers, but has not had the effect of pushing them into the tight category.

Dioctyl Phthalate—Material was reported moving along quite well during the past week. Most producers found that they were shipping all of their current production. The price situation showed no significant change, with major sources maintaining their listed quotations firmly. The present high cost of raw material and of manufacture combined to produce a firm undertone in price listings.

Tricresyl Phosphate—Demand for plasticizer usage was expected to be quite good in the fourth quarter, it was stated by makers during the past week. All indications pointed to a good buying interest on the part of users. Price quotations remained steady, with no definite word of any changes being under consideration. Advances in raw materials, however, have added to manufacturing costs over the recent past.

Fillers and Inerts

Gypsum—Domestic mine production of crude gypsum during the second quarter of 1955, as reported by the Bureau of Mines, soared to a new record of 2,750,730 short tons. This total was 22 percent more than production in the same months of 1954, and established an all-time high for any quarter in the history of the industry. Imports continued at a high level during the second quarter, 877,149 short tons being brought in from other countries, it was reported.

Talc—Combined mine production of talc, soapstone and pyrophyllite in the United States decreased 6 percent in quantity and 8 percent in value in 1954, compared with 1953, according to the Bureau of Mines. Pyrophyllite production increased 3 percent in 1954, compared with 1953 and exceeded the previous high recorded in 1952 by 1 percent. New York, California and North Carolina continued to rank first, second, and third, respectively, in the quantity of talc, soapstone and pyrophyllite produced, according to the report. Ground talc, soapstone and pyrophyllite sold by grinders decreased 6 percent in quantity in 1954, compared with 1953, but increased 4 percent in value.

Natural Resins

Copal, Dammar Gums—Singapore and East India batu grades of dammars firmed noticeably as supplies dwindled at the sources and holders there kept a firm hand on available goods. Latest price range offered for No. 1 Singapore was 44c. to 46c. per pound, up 1c. from the earlier range. Other dammars were as yet unchanged on spot, but were tending higher. Buying by other consuming countries has been active and has helped produce the situation of lowered stocks now encountered at the source.

Copals appeared steady and were unchanged from earlier spot offers. Buying of both copals and dammars has been fairly active of late, it was noted by dealers. The spot market was not quite so well supplied as it ordinarily is, but a situation of acute shortage of goods was not encountered.

Shellac—A good deal of strength was observed in the market during the past week. Prices at Calcutta firmed by approximately ¼c. to ½c. per pound. Dealers in this country, however, did not believe that this advance would rise more than its present fractional amounts, and felt that the overall trend was one of steadiness, with a chance of slight price reductions amounting to 1c. to 2c. per pound sometime in the coming weeks. Any larger decline than this was doubted.

Material from Siam was reported playing a definite part in the picture, and would become more important throughout the coming weeks. Some Siam goods were reported sold too early, and were not actually ready to be shipped, because of a high moisture content. Buying in this country was reported steady and of a good, but not spectacular, volume.

Miscellaneous Materials

Casein—Offers from the Argentine continued limited, because of limited stocks on hand in that country. The start of the flush season in that country, however, meant that new production would become a factor in the market sometime in the next thirty days. The current price to consumers in this country on a duty-paid, delivered New York basis, was steady at 24c. per pound, with very little shading reported possible below this figure. Consumers bought only for immediate needs and were considered fairly well covered at the present.

New Zealand material was quite firm

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and occupied a price range of 26c. per pound and up.

Naval Stores

August production of gun naval stores amounted to 19,500 barrels of turpentine and 55,350 drums of rosin, according to the Department of Agriculture. This was about 15 percent less than for August last year. Production from April to August was 19 percent less than for the same period last season. The output of wood turpentine was 10 percent higher than for July, bringing the total for the season to date to 202,570 barrels, or 35,140 barrels more than for the corresponding months last year.

During August, 280 barrels of crude sulfate turpentine were burned at production plants. Steam distilled wood rosin production was 6,140 drums larger than for the previous month. The shift in gum turpentine and rosin from "stocks controlled by the Commodity Credit Corporation" to "all other stocks" continued during August. At the end of August both gum and wood turpentine stocks were slightly higher than on July 31. Gum rosin stocks amounted to 667,980 drums and wood rosin stocks were 50,870 drums.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Sept.30	Mon. Oct. 3	Tues. Oct. 4	Wed. Oct. 5	Thur. Oct. 6
Drums—					
G	...	...	$8.45	...	...
M	$9.57§	...	...	...	...
N	9.00				
WG	8.58§	$8.60	8.50	$8.52	$8.50
WW	8.58§	...	8.63	8.65	...
Bags—					
M			8.41	...	...
N	8.50	8.45		...	...
WW	9.23§	8.75	8.58	...	...
Sales, USDA	1,333*	422*	371*	306*	160*

New York

(per 100 lbs., c.l., Friday)

B through N, $9.55; WG, $9.60; WW, $9.70.

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.55¾	.56§	...	.56¼	.564
Sales	10,000¶	18,000¶	...	16,000¶	4,000¶

New York, Friday, per gal. 7 lbs., tankcars, 63½c., l.c.l. 75c.

*Drums equivalent. ¶Gallon. §Average price.

Shawinigan Resins Marks Progress With Sales Staff

Shawinigan Resins Corporation, which earlier this year assumed responsibility for the sale of its products from the parent firms, Monsanto Chemical Company and Shawinigan Products Corporation, has announced completion of the first phase in the organization of a nationwide sales staff.

A. W. Dunning, director of the newly-formed marketing department, said that Shawinigan Resins' sales offices now are located in Springfield, Mass.; New York and Los Angeles. An office will be opened in Chicago within the next month. "These offices," Mr. Dunning said, "will service the major market areas for Shawinigan's vinyl acetate resins and emulsions. Equally as important, they will serve as the nucleus for more intensive sales coverage now in the planning stage."

At the same time, Mr. Dunning announced the appointment of nine staff members to newly-created posts within the marketing department, effective immediately. J. W. Criss is now manager of special projects. Headquartered in New York, he is responsible for sales of ethyl acetate, acetic acid, and methyl acetate.

In field sales, the five appointed assistant district sales managers reporting directly to Mr. Dunning and responsible for all other sales are:—Charles A. Godsell, headquartered in Springfield and responsible for the New England territory; F. H. Hoyt and E. H. Finsilver, jointly are responsible for the New York office; W. M. Young, Chicago; and Leonard Roland, Los Angeles. On the Springfield central staff, new appointments include:—W. K. Wilson, manager of technical service; D. H. Fraser, manager of market research; and J. A. Cooper, assistant manager of product development.

NY PVLA Committee Will Meet October 19 for Epoxidation Talk

The next meeting of the vehicle manufacturers' committee of the New York Paint, Varnish and Lacquer Association will be held on October 19 at the Brass Rail Restaurant, 521 Fifth avenue, New York. The featured speaker will be Dr. Daniel Swern, supervisor of chemicals for Eastern Regional Laboratories, who will talk on epoxidation.

Pittsburgh Plate Glass Fills Two Posts in Paint Division

Two executive appointments in Pittsburgh Plate Glass Company's paint division have been announced by E. D. Peck, vice-president in charge of the paint and brush division.

Walter W. Ethier, jr., formerly manager of the Atlanta paint division in East Point, Ga., has been named general manager of the Newark, N. J., paint division. He succeeds A. I. Pruett who resigned recently. Charles R. Holman has been appointed general manager succeeding Mr. Ethier at the Atlanta division. Prior to his appointment Mr. Holman had served as assistant manager at Newark since 1954.

Stein, Hall Names W.B. Amos

Stein, Hall & Co., New York has announced that William B. Amos has rejoined the company as a sales representative in its Atlanta, Ga., territory. In this post, which he formerly held from 1952 to 1954, he will be concerned with the sale of most of the company's line of products, placing particular emphasis on servicing of the textile industry.

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DIOCTYL SEBACATE
DICAPRYL ADIPATE
DI-HEXYL ADIPATE
DI-ISO-OCTYL ADIPATE
DIOCTYL ADIPATE
DIBUTYL PHTHALATE
DICAPRYL PHTHALATE
DIHEXYL PHTHALATE
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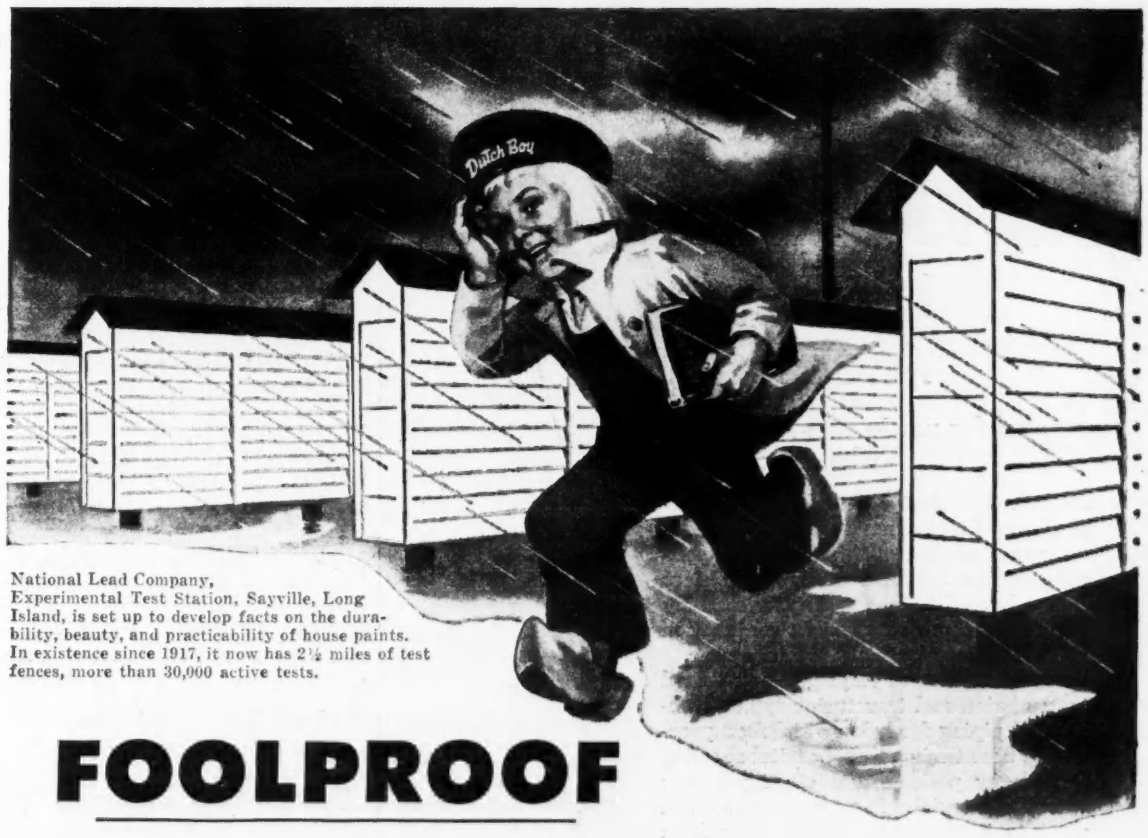

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But you may not know that Dutch Boy Basic Silicate White Lead "45X" does this with new efficiency, new economy. Thousands of exposure panels at National Lead's Sayville Experimental Test Station prove this.

Take *white* House Paints. "45X", Sayville shows, improves self cleaning yet preserves film integrity.

Take *tinted* House Paints. "45X" helps maintain color uniformity, increases film durability.

Take Primers . . . or Porch and Floor Enamels. When you add Dutch Boy "45X" to your exterior paints, you build up key properties . . . build in *uniform* performance.

Fewer Complaints

Those you hear! Those you don't! Both go down, you'll find. You save time and cost of adjusting complaints. Repeat business comes easier, at less expense.

Cost goes down, too. In each "45X" pigment particle, reactive portion is at the surface . . . making proportionately larger amounts of lead available in each pound.

Fewer complaints! Lower cost! No wonder it pays to put Dutch Boy Basic Silicate White Lead "45X" in your exterior paints.

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(Di-Isooctyl Phthalate)
from
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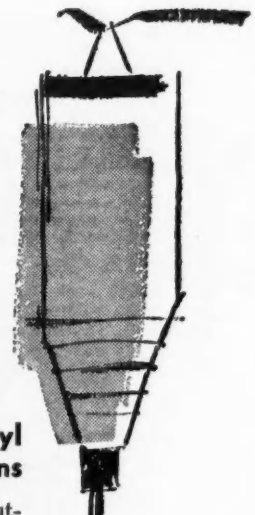
Isooctyl
Alcohol



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Indoil Chemical Company does not manufacture D.I.O.P. or other esters. Leading plasticizer manufacturers use INDOIL Isooctyl Alcohol on account of its unexcelled esterification quality.

For information on D.I.O.P. and other Isooctyl ester plasticizers, write your supplier. For information on INDOIL Isooctyl Alcohol and its esters, write Indoil Chemical Company, 910 South Michigan Avenue, Chicago 80, Illinois.

*Reference: Vol. XVIII, No. 4, October, 1954, Association of Food & Drug Officials of the United States.

INDOIL CHEMICAL PRODUCTS
INDOIL CHEMICAL COMPANY
910 South Michigan Avenue, Chicago 80, Illinois

Gasoline Price War Probe To Be Resumed October 19

Senator John Sparkman of Alabama, chairman of the senate small business committee and Senator Hubert H. Humphrey of Minnesota, chairman of the subcommittee on retailing, distribution, and fair trade practices, have announced jointly that public hearings on the New Jersey gasoline price wars will be resumed on October 19 in the Federal Court House, Newark, N. J. The hearings will continue on October 20.

The subcommittee opened its hearings on July 22 in Washington, D. C., by receiving testimony from New Jersey gasoline dealers on the causes of gasoline price wars and the competitive conditions under which such wars are fought. According to Senator Humphrey, Governor Robert B. Meyner of New Jersey has been invited to appear before the subcommittee to give his views and recommendations on the price war situation.

Senator Humphrey also announced that hearings will be scheduled late in the fall to hear from officials of the major oil companies doing business in New Jersey and also from representatives of the Federal Trade Commission and the antitrust division of the Department of Justice.

Pittsburgh Plate Announces Executive Personnel Shifts

Pittsburgh Plate Glass Company, Pittsburgh, Pa., has appointed John F. Green as general manager of the company's Ditzler Color Division in Detroit, Mich. Mr. Green had previously served as assistant general manager for the Detroit division.

At the same time, it was announced that Harold H. Hill has been appointed general manager of automotive finishes for the company. G. G. Davison has been named supervisor of cost planning, succeeding T. G. Coyne, who resigned recently.

Ethyl Acrylate Properties Detailed In Bulletin Prepared by Carbide

Ethyl acrylate, n-butyl acrylate, 2-ethylbutyl acrylate and 2-ethylhexyl acrylate are issued by Carbide & Carbon Chemicals described in a technical bulletin recently Company, a division of Union Carbide & Carbon Corporation, New York.

The new booklet covers methods of polymerization, applications of polymers and copolymers, and selected references. Physical and chemical properties, shipping data, and reactions of the acrylic esters in chemical syntheses are included. Copies of this bulletin, F-7434, are available from Carbide at 30 East 42nd street, New York 17.

Paint Show Features

—Continued from page 74

cal & Dye Corporation, New York, featured alkyd, urea, melamine and phenolic coating resins. Shell Oil Company, New York, exhibited petroleum solvents of low odor or odorless characteristics.

Monsanto Chemical Company, Springfield, Mass., stressed service and availability of plastic products at its exhibit. Nuodex Products Company, Elizabeth, N. J., displayed fungicides and other paint additives. Hercules Powder Company, Wilmington, Del., displayed its chlorinated rubber, ethyl cellulose, pentaerythritol and other polyols, as well as resins.

Synthetic Iron Oxide Pigments

Columbian Carbon Company, New York, featured synthetic iron oxide pigments. Celanese Corporation of America, New York, offered information on technical service and application on a number of recently developed chemeicals. Nopco Chemical Company, Harrison, N. J., displayed its new polyvinyl acetate emulsions.

Sharples Chemicals Division of Pennsylvania Salt Manufacturing Company, Philadelphia, featured the use of isopropylamine to obtain better pigment dispersion. Advance Solvents & Chemical Corporation, New York, featured rare earth metals as drier catalysts and film improvers. Rohm & Haas Company, Philadelphia, displayed a house exterior demonstrating characteristics of acrylic resin paints.

Ross & Rowe, Inc., New York, displayed uses of lecithin in coatings. R-B-H Dispersions, Bound Brook, N. J., showed panels and electron micrographs of titanium dioxide dispersions in nitrocellulose. Shawinigan Products Corporation, New York, exhibited polyvinyl acetate emulsions and polyvinyl acetate-chloride emulsions. Hilton-Davis Chemical Company, Cincinnati, Ohio, displayed a flushing machine.

Archer-Daniels-Midland Company, Minneapolis, Minn., displayed a colonial home, with blister-resistant paints, shingle stains, and industrial and interior finishes. Minerals & Chemicals Corporation of America, Metuchen, N. J., showed products of its Attapulgus and Edgar divisions. Baker Castor Oil Company, New York, exhibited thixotropic vehicles, epoxidized plasticizers, and an ester-interchange catalyst.

Alkyds and Silicones Illustrated

General Electric Company, Pittsfield, Mass., featured paintings, artists, and demonstrations of alkyds and silicones. Spencer Kellogg & Sons, Inc., Buffalo, N. Y., displayed vegetable oil products for use in the coatings industry. Shell Chemical Corporation, New York, featured a high boiling lacquer solvent, ethyl amyl ketone, as well as epoxy resins, alcohols, and bisphenol-A.

Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation, exhibited its line of chemicals for resin emulsion. Anderson-Prichard Oil Corporation, Oklahoma City, Okla., exhibited properties of solvents. Neville Chemical Company, Pittsburgh, Pa., displayed coumarone-indene and petroleum resins.

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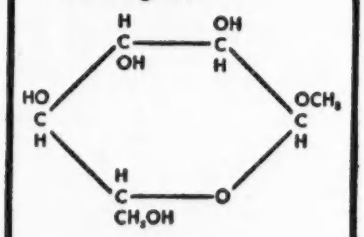

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Cuban Lard Use This Year Seen Topping 1953 and '54

The Foreign Agricultural Service has reported that Cuban lard consumption may exceed 176,000,000 pounds this year, an increase of 5,000,000 pounds over 1954 and 31,000,000 pounds over 1953. The current low prices are encouraging larger domestic sales, it was stated. All of Cuba's imports of lard are from the United States.

Consumption of edible tallow reached 134,000,000 pounds in 1953 and 160,000,000 in 1954. Consumption this year, however, may rise to 165,000,000 pounds. Consumption of edible tallow in 1955 is expected to be around 37,000,000 pounds, about the same as in the preceding year.

Cuban imports of lard were 83,000,000 pounds for the first half of 1955. If this rate of imports is maintained for the remainder of the year, approximately 165,000,000 pounds should be received, which would be the largest imports since 1952. Imports of edible tallow were 1,000,000 pounds; inedible tallow imports totaled 14,000,000.

Copra From the Philippines Up During First Half of Year

Philippine production of copra, coconut oil and desiccated coconut in terms of copra totaled 512,470 long tons during the first six months of this year, according to the Foreign Agricultural Service. This represents an increase of 6 percent from production during January-June, 1954.

Coconut production during 1954 and 1955 has been favored by fairly good weather. Damage from typhoons during 1953 and 1954 was slight and the major producing areas in Luzon were not adversely affected. Increased production also can be attributed to the continued rise in area planted to coconuts.

Notwithstanding the areas devastated by kadang-kadang disease, part of which has been replanted, official data indicate an annual increase in coconut plantings since the end of the last war. From an estimated area of 2,400,000 acres under coconuts in 1945, the acreage increased to 2,700,000 acres in mid-June of last year, according to the preliminary estimated of the Bureau of Census and Statistics.

DuPont Appoints Maher Asst. Auto Sales Manager

G. Raymond Maher has been appointed assistant automotive sales manager of the fabrics and finishes department of E. I. duPont de Nemours & Co., with headquarters in Detroit, Mich., Mr. Maher succeeds Edwin L. Theurer, assistant automotive sales manager since 1946, who requested reassignment for reasons of health. Mr. Theurer will become a staff assistant in the Detroit sales office.

Mr. Maher joined duPont in 1929 as a chemical engineer at the Parlin, N. J., finishes laboratory. He later was a production supervisor at the Parlin plant, and in 1949 was assigned to the Detroit office as an automotive finishes salesman. He went to Mexico City in 1952 as manager of the finishes department of the company's Mexican subsidiary, duPont, S. A. de C. V., where he directed sales, production and technical activities. He returned to Detroit last month.

Socony Adds to Lab Space

Construction is expected to begin shortly at Paulsboro, N.J., on a $600,000 building to house the chemical, radio-chemical, physical, and other analytical operations of the research and development laboratories of Socony Mobil Oil Company, New York. The new analytical laboratory will nearly double the company's space available for analytical operations in petroleum research.

TAPPI Plastics Parley

—*Continued from page 7*

Henry Maeder of Dixie Cup Company will present "Cup and Container."

A session luncheon will be held November 15. Charles Lewis, director, container and packaging division, U. S. Department of Commerce, will be the luncheon speaker. His talk will be an off-the-record discussion of "Government Plans for the Industrial Mobilization of the Paper and Plastics Industries."

Polyethylene Talks Planned

The chairman of the fourth session, covering "Polyethylene Extrusion Coating," will be R. C. Sturken of Frank W. Egan & Co. Kenneth A. Arnold of St. Regis Paper Company will present "Physical Properties of Papers Coated with Polyethylene by Extrusion." He will be followed by William R. Penrod of Dilts Machine Works, talking on "Performance and Design Data of Colling Roll on Polyethylene Extrusion Laminating Machine." John C. Rice of Lowe Paper Company will cover "A Comparison of Polyethylene and Polyethylene-Wax Paper Coatings." The session will close with a discussion of "Polyethylene Extrusion Lamination - Equipment, Design & Operation," by Ernest C. Bernhardt of E. I. duPont de Nemours & Co.

USDA Finds Improved

—*Continued from page 5*

plant steroids now used for cortisone production have only one of these desired chemical structures. If the new steroids can be supplied in large enough quantities, their use would simplify cortisone synthesis considerably.

Several years ago, a report of the existence of Mexican yams that contained steroids with a combination of the two desired chemical structures resulted in a number of plant-hunting expeditions, organized by interested groups. But until the recent findings by USDA scientists, plant explorers had been unable to locate plants containing the desired steroids, and chemists were beginning to doubt that such substances actually existed.

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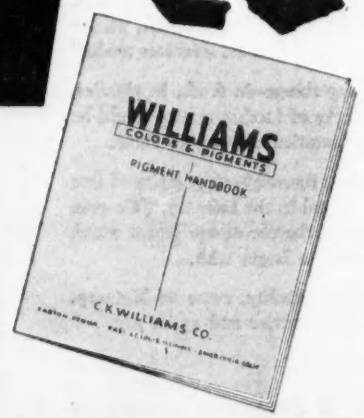

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Chemstrand Corp. Shifting Management, Plant Officers

Chemstrand Corporation, Decatur, Ala., has announced several appointments. Cloyce L. Purdom has been named assistant to the president, and Arvon L. Davies has been named coordinator for overseas development. Dr. Bruno R. Roberts has been appointed section head of the technical information section of the administrative division of the research and development department.

John C. Fisher has been promoted to the position of staff purchasing agent. Alton E. Peacock, Pompelio A. Ucci, and C. J. Waitkus have been named group leaders in the research and development department. Joseph C. Thompson has been appointed utilities superintendent for the acrylic fiber manufacturing plant of the corporation.

International Minerals Names Roe Beneficiation Engineer

Lawrence A. Roe has been appointed minerals beneficiation engineer by the engineering division of International Minerals & Chemical Corporation, Chicago. Mr. Roe, who has had eighteen years experience in the chemical and mineral beneficiation field, went to International from Bjorksten Research Laboratories, Madison, Wis., with whom he had been associated for the last four years.

From 1947 to 1951 Mr. Roe was technical supervisor of the ore research division of Jones & Laughlin Steel Corporation. One year of this period was spent at the corporation's Benson Mines plant, where a process for recovery of nonmagnetic iron ore was pilot planted and proven a commercial success.

Hagan Makes Rice Director

Owen Rice, vice-president in charge of industrial chemical sales for Hagan Corporation, Pittsburgh, Pa., has been elected a director of Hagan and its subsidiaries, Calgon, Inc.; Hall Laboratories, Inc., and Buromin Company. Mr. Rice fills a vacancy on the board created when E. M. Chaney retired as company treasurer and director.

Plant Food, Duggan Merge

Plant Food Corporation, Los Angeles, has announced completion of a merger with Charles E. Duggan Company, Pomona and Riverside, Calif., distributors of agricultural chemicals. Mr. Duggan has been retained to supervise the Pomona

Caustic Potash Data Are Presented In Columbia-Southern's Publication

An 18-page, two-color brochure describing the manufacture and usage of caustic potash has been issued by Columbia-Southern Chemical Corporation, subsidiary of Pittsburgh Plate Glass Company, Pittsburgh, Pa. The illustrated booklet includes detailed procedures for unloading and precautions for handling. It contains technical data including specific gravity and density tables of solutions as well as temperature and alkali conversion tables. Copies may be obtained upon request to the company.

Carbide Fine Chemicals Unit Picks Three Product Heads

J. M. Cole and J. H. Mathewson have been appointed product managers and George Trigaux has been appointed assistant product manager in the fine chemicals division of Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation.

Mr. Cole will be responsible for the market development of chemical intermediates and Mr. Mathewson will be responsible for the market development of "Flexol" plasticizers and stabilizers for vinyl resins. Mr. Trigaux, who is being transferred from the company's South Charleston plant where he was area supervisor in charge of one of the production units, will assist Mr. Cole.

Manganese Rights Taken Up

Vanadium Corporation of America, New York, has exercised an option to buy a manganese mining concession in Northern Rhodesia for $1,000,000, it has been reported. The concession compromises more than 200 square miles and was purchased from the Weedon interests of Johannesburg, South Africa.

Coal Chemicals

--Continued from page 53

might develop. Prices held to previous levels.

Styrene Monomer—Interest in this intermediate remained active as synthetic rubber producers and plastics manufacturers maintained good buying interest. Sales during the past few months were following the same pattern of earlier in the year. The rise in buying for the production of polymers and coatings has helped to firm this market considerably. The good condition of this material was not expected to change during the final quarter as the over all business picture was good. Production was matching demand in most areas. No price alterations were noted in the market.

p-Toluidine—Suppliers stated that demand held up fairly well in recent weeks. The manufacture of textile dyestuff intermediates continued to place good demand on this material. There had been a considerable easing of demand during the late summer months as many plants were on vacation schedules, but all were reported back to normal production. Good buying during the fourth quarter was expected, following the general good business outlook. No changes in prices were noted during the recent past.

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Oils, Fats and Waxes

Feature of edible grades was the rallying power of crude cottonseed and soybean oils as a result of improved export interest. This was reflected in corn, which regained a fractional decline and peanut which also was advanced for an occasional carlot. Trading for domestic needs was reported limited, chiefly for prompt needs.

Crude coconut oil was easier and lower, with the decline of copra shipments. Business in both commodities was reported slow.

Tallow and greases developed an easier tone and all grades were off fractionally. Export interest was limited, with domestic buyers taking moderate lots at the decline. Offers became more liberal at the lower levels, but buyers reduced bids. Other animal oils were unchanged and fairly steady. Lard was firm and slightly higher.

Lower prices were announced for linseed oil for all deliveries due to slow business and stronger linseed meal market. Tung oil was unsettled and slightly lower. Following a meeting between government officials and members of the trade, CCC announced that it will continue to offer government stocks of tung oil on a competitive bid basis. Stocks of crude menhaden oil were reported scarce and the market was strong, but nominal, due to the lack of offerings. Refined fish oils continued firm and in good demand. Domestic castor oil was advanced fractionally, reflecting the higher cost of beans. Brazilian castor oil also was higher and in active demand.

Trading in cottonseed meal was light with exporters showing less interest. Prices were off $2 per ton for prompt shipment. Soybean meal was in limited supply for nearby delivery. October forward deliveries were easy and $1 to $2 lower. Linseed meal was firmer, advancing $2 per ton.

Price Trends

Advanced

Cocoa butter, 1c. per lb.
Lard, ¼c. per lb.
Linseed meal, $2 per ton.
Oil, castor, domestic, ¾c. per lb.
No. 1 Braz., ¼c. per lb.
Coconut, deod., refd., 1c. per lb.
Peanut, crude, ½c. per lb.
refd., ½c. per lb.
Soybean, crude, ¼c. per lb.
refd., ¼c. per lb.

Reduced

Copra, $7.50 per ton.
Cottonseed meal, $2 per ton.
Greases, ¼c. per lb.
Oil, coconut, crude, ½c. per lb.
Linseed, 3/10c. per lb.
Oiticica, ¼c. per lb.
Tung, ¼c. to ¼c. per lb.
Soybean meal, $1 to $2 per ton.
Tallow, ⅛c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Oct. 8, 1954
106.48	107.13	100.85	103.12

(For Current Prices see Page 9)

Vegetable Oils

Castor—Domestic grades were higher as a result of the increased cost of castor beans. Prices of all grades were lifted ¾c. per pound, for drums lots. Offers of tankcars were still limited. No. 1 Brazilian oil also was stronger, with trading reported at 14¼c. per pound, tankcars, New York, prompt delivery.

Coconut—This market was easier and off fractionally with lower copra. Crude was quoted at 11⅛c. per pound, tankcars, f.o.b. Pacific coast, prompt and later shipment and at 12½c., New York, prompt delivery.

Corn—Crude was steadier with trading noted at 12¼c. per pound, tankcars, f.o.b. mills. Refined oil was unchanged at 15¾c. per pound, tankcars, New York delivery.

Cottonseed—Bleachable cottonseed oil futures were featured by a steady undertone due principally to the resumption of export interest in crude oil. Exporters it was reported purchased from 4,000, to 5,000 tons of crude during the week. Trading in futures was quite active and the market closed fractionally higher. Market was supported by exporters and professionals, while trade interests were credited with selling on the bulges. October oil tenders amounted to 31 contracts and were stopped. Interest in cash oil was reported slow. Refined salad oil was held at 15¼c. per pound, tankcases, New York, prompt delivery.

Crude cottonseed oil was steadier due to export demand. Sales were reported at 11¾c. per pound, tankcars, f.o.b. mills in the southeast; 11½c. in the Valley and 11¼c. to 11½c. in Texas, depending upon location.

Spain has asked American exporters to offer 10,000 tons of refined vegetable oils, including cottonseed, peanut and soybean oils. Purchases are scheduled to be made on October 13, with shipments by November 15. Payments are to be made in U. S. dollars.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended October 7 follow:—

	Sales	Cents per pound High	Low	Close
October	96	13.75	13.47	13.79@13.84
December	184	13.97	13.54	13.89S
January	39	14.00	13.65	13.85@13.95
March	208	14.04	13.67	13.95S
May	114	14.03	13.68	13.91@13.93
July	28	13.91	13.60	13.55@13.65

Total sales, 669 contracts.

Memphis.—Crude cottonseed oil was 11⅜c. bid, tankcars, f.o.b. Valley. Cottonseed meal was quoted at $57 to $58 per ton, sacked, Memphis; cottonseed hulls, $6 per ton, bulk and $10 sacked, same basis. Demand was fair.

Linseed—Firmer linseed meal, combined with slow demand for oil weakened the latter market. Raw oil was reduced to 13.2c. per pound, tankcars, Minneapolis, warehouse; 13.1c., first half October; 12.9c., second half October; 12.7c., November; 12.4c., December, February and 12.2c., March-August. While new business was limited to actual needs, an excellent demand was reported for delivery against current contracts.

Minneapolis.—Flaxseed processors reduced the price of raw linseed oil 3.10 of a cent a pound, effective Oct. 5. This brought the warehouse price down to 13.2c. a pound, f.o.b., Minneapolis. Tanks for first-half October were quoted at 13.1c. a pound, second-half October, 12.9c.; November, 12.7c.; December-February, 12.4; March-August, 12.2c. Prices of general acceptance were two-tenths lower. Shipments held steady.

Shipments of linseed oil, in pounds, were as follows:—

	1955-56	1954-55
Past week	6,900,000	7,680,000
Since Sept. 1	39,420,000	45,460,000

Flaxseed—Trading moderate. Market unchanged and steady.

Minneapolis.—The flaxseed market was featureless, with spot and to-arrive cash offerings going at $3.10 a bushel, Minneapolis and Duluth basis. Spot cash market purchases amounted to only 43 cars. To-arrive bookings totaled 46 cars and 70,000 bushels in truck-lots. Arrivals of seed for all accounts during the week totaled 410 cars as against 828 cars the previous week and 1,418 a year ago. Shipments from Minneapolis totaled 60 cars, com-

Cottonseed Crush: August

Cottonseed received and crushed and production of cottonseed products during August and July, 1955, as compiled by Bureau of the Census, follows:—

Cottonseed

	August	July
	Tons	
Receipts at mills	348,692	131,087
Crushed or used	212,310	160,338
Stocks at mills	345,446	209,064

Crude Oil

	Pounds	
Produced	70,391,000	56,962,000
Stocks at mills	23,386,000	24,788,000

Refined Oil

	Pounds	
Produced	57,996,000	59,120,000
Factory and warehouse stocks	[1]287,292,000	[1]344,085,000

Cake and Meal

	Tons	
Produced	103,409	78,293
Stocks at mills	169,703	203,090

Hulls

	Tons	
Produced	47,922	36,071
Stocks at mills	45,750	41,654

Linters

	Bales	
Produced	[2]66,834	[2]50,613
Stocks at mills	[2]77,223	[2]130,033

[1] Includes 168,000,000 pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corporation. This figure, as well as the comparable July 31 figure of 187,000,000 pounds, include quantities sold for export by C.C.C. but not "lifted" but excludes quantities sold by C.C.C. for exports and being further refined. As of August 31, C.C.C. reported that it had removed from inventory and put in an "in-transit position to other storage" about 39,000,000 pounds of refined cottonseed oil, all of which has been accounted for in respondents reports to the Census Bureau.

[2] Average gross bale weight in pounds for August and July production respectively:—Total 608.3 and 620.3; first cut, 614.4 and 602.0; second cut, 619.6 and 626.2; and mill run 531.6 and 620.8.

For Late Market Developments, See Page 4

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SPECIFICATIONS

Titre	3°C. max.
Cloud Point	38°F. max.
Color 1" Lovibond Red	2 max.
Color 1" Lovibond Yellow	15 max.
Unsaponifiable	1.5% max.
Saponification Value	198 — 203
Acid Value	197 — 202
% F.F.A. as Oleic Acid	99 min.
Iodine Value (WIJS)	96 max.
Refractive Index 50°C. (Average)	1.4505

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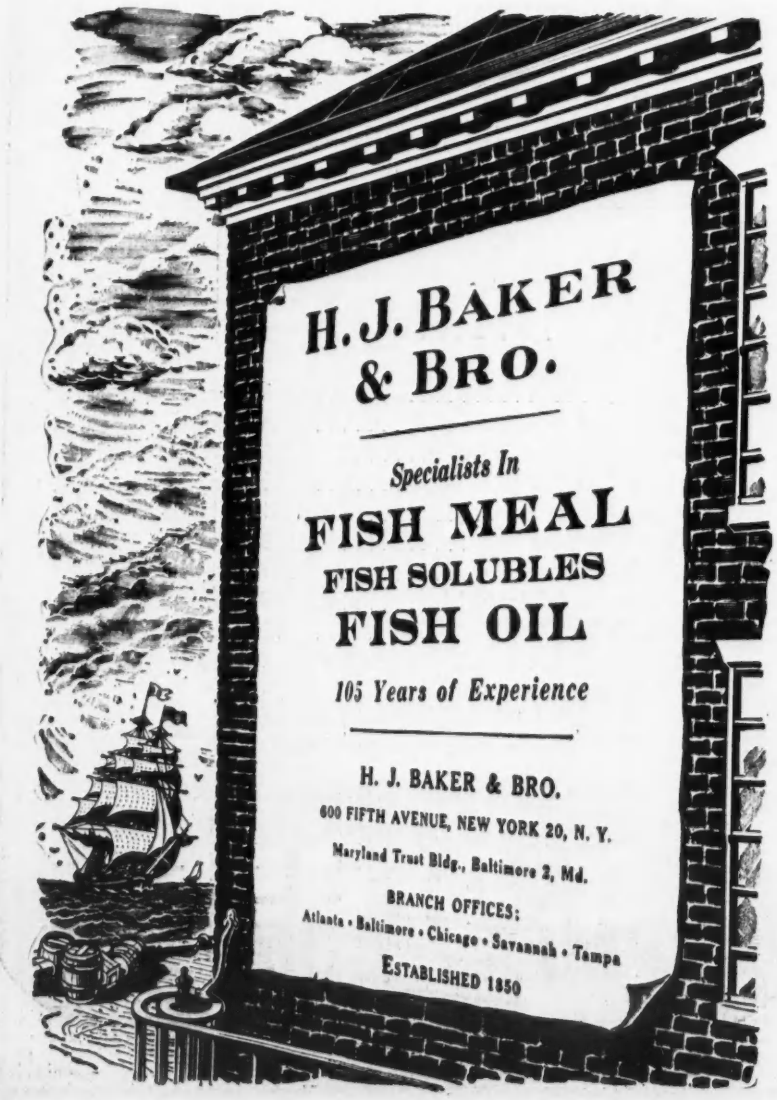

Soybean Crush: August

Soybean received and crushed and production of soybean oil and meal during August and July, 1955, as compiled by the Bureau of Census, follows:—

Soybeans

	August	July
	Tons	
Receipts	496,546	633,374
Crushed	596,739	640,049
Stocks at mills	216,023	316,216

Refined Oil

	Pounds	
Produced	213,451,000	182,704,000
Factory and warehouse stocks	78,623,000	67,093,000

Crude Oil

	Pounds	
Produced	219,494,000	235,756,000
Stocks at mills	49,112,000	51,751,000

Cake and Meal

	Tons	
Produced	458,537	493,481
Stocks at mills	69,232	98,268

pared to 34 the preceding week and 229 cars a year ago. In a report on crushings, the Agriculture Department said 2,600,000 bushels of seed were processed in August, compared to 2,000,000 bushels in July and 3,500,000 bushels in August, 1954. Supplies of seed remaining for crushing, export or carryover on September 1 were placed at 44,000,000 bushels, compared to 42,250,000 a year ago. Stocks of flaxseed at crushing plants on September 1 totaled 3,000,000 bushels, compared to 1,900,000 a year ago.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts		Shipments	
	1955-56	1954-55	1955-56	1954-55
Past week	721,000	2,448,250	105,000	400,750
Since Sept. 1	7,470,750	7,169,500	798,000	1,848,000

Oiticica—This market was easier. Tankcars ranged from 13½c. to 13¾c. per pound, tankcars, New York, prompt delivery, as to seller. Drums were quoted at 14¾c. to 15¼c. per pound, according to quantity.

Olive—Fair volume of business was reported at prevailing quotations. Prices remained steady at $2.40 to $2.50 per gallon, drums, spot duty paid, depending upon quantity. Primary markets remained firm, with offers confined to Spain, with other sources reported out of the market.

Peanut—Offers of crude continued scarce and sellers were asking 18c. per pound, tankcars, f.o.b. mills, southeast, prompt shipment, against bids of 17½c. Refined oil also was firm and higher at 21¼c. per pound, tankcars, New York, prompt delivery.

Rapeseed—Buying interest was light and spotty. Refined was unchanged at 15¾c. per pound, tankcars, New York, prompt delivery.

Soybean — Crude was stronger, advancing fractionally due to improved export buying. Offers were light and well held. Sales and bids were reported at 10⅞c. per pound, tankcars, Decatur, immediate shipment; 10⅞c. straight October and 10¾c. December, with January-June offered at the same level. Refined salad was higher at 13⅝c. per pound, tankcars, New York, prompt delivery.

Sales and prices of crude soybean oil futures on the N. Y. Produce Exchange in tankcars (60,000 pounds) for the week ended October 7 follow:—

	Sales	Cents per pound		
		High	Low	Close
October	41	10.77	10.59	10.88@10.90
December	13	10.77	10.47	10.78@10.83
January	6	10.68	10.50	10.75@10.80
March	14	10.75	10.68	10.72@10.76
May	29	10.76	10.62	10.75S
July	20	10.65	10.42	10.68@10.73
September	1	10.40	10.40	10.40@10.50

Total sales, 124 contracts.

Tung—This market was easy and fractionally lower. Light trading was reported at 25¼c. to 25⅜c. per pound tankcars, New York, as to seller. Domestic oil was quiet and nominal at 1c. per pound, less.

No sales were reported by CCC last week, the agency refusing low bids for 45 tankcars offered.

Miscellaneous

Castor Beans—Offers for shipment were reported light. Market was stronger with sales reported up to $130 per ton, f.o.b. Brazilian ports.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	384,000	404,000
Previous week	1,000,850	822,000
Corresponding week, 1954	8,717,100	600,000
Total this year	62,384,210	61,774,000
Corresponding period, 1954	87,610,800	31,900,000

Cocoa Butter — Market was higher, ranging from 54c. to 59c. per pound, spot, depending upon quantity. Buying interest was more active.

Copra—Shipments were easy and lower at $155 per ton, c.i.f. Pacific coast. Trading was reported slow.

Fats and Greases

Greases—This market was easier and lower. Business was restricted to domestic needs, with exporters showing little interest. Yellow grease ranged from 7⅜c. to 7½c. per pound, tankcars, delivered, as to acid content; choice white, all hog, 9¼c. to 9½c. and not all hog, 8¾c. to 9c., same basis.

Lard—Futures were steadier and higher. Cash lard was quoted at 11c. per pound, drums, Chicago.

Oleo Oil—Trading in extra was reported

—Continued on page 86

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SPENCER BLOWERS—(NEW) 150 CFM 16 Oz, 270 24, 450 24, used 1300 16.
PULVERIZERS—Jeffrey 20x24, Flextooth & 30x42 style B Hammer mills, Bauer double attrition—2—10 H.P.
PEBBLE MILLS—24x36 w/feeder, 4x5, 6x3 porcelain lined, 24x36 s s ball mill w/ motor drives.
SCREENS—Rotex 3x10 double Tyler Hummer 3x5 (single, double, triple) decks.
VACUUM PUMPS—Nash Hytor MD673, 623, H7, Ingersoll Rand 16 CFM 2 stage.
ROTARY DRYERS—12"x22', 40"x21' (used) 39"x30' (new) complete w/firing hoods, discharge hoods, oil burners.
HARDINGE MILLS—2'x8", 4½'x16", 6'x22", 7'x48".
CRUSHERS—Roll—18x18, 32x12, 30x16, 24x 36 McLanahan single roll.
FILTER—Sparkler 17 plate—33" dia. Rubber lined—s s fitted—Shriver Plate & frame—12x12—4 eye.
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NEW AND GOOD-AS-NEW EQUIPMENT
1—Stainless Tank #430 Chrome, vert. 7'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Copper Evaporator, steam jacketed, 9'1"x3'9".
60—New Pressure Cookers, 18"x18" & 24"x26".
150—Pumps—steam and electric.
1—New Glass Nash Centrifugal Pump, 160 gpm.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—4x8 Sturtevant Jaw Crusher.
1—Abbe Ball Mill, 36"x42" Buhrstone lined.
#316 Stainless Steel Tanks, new 100, 200 & 360 gal.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer, 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60".
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Stokes Single Punch Tablet Machine.
1—Kennedy-Van Saun Rotary Dryer, 4'x40'.
Davenport Rotary Steam Tube Dryer, 6'x36'.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 47"x27".
1—Patterson Ball Mill, 42x36, jacketed.
3—Dopp Kettles with agitators, 600 gal. cap.
45—Steel Tanks from 100 to 100,000 gals.
2—Large Steam Jacketed Horizontal Mixers.
Robinson Pulverizer #20, with 2 motors 10 HP each.
Robinson Ribbon Type Mixer, 30"x10'—like new.
4—Horizontal Retorts 200# w.p., A.S.M.E., from 12" to 24" dia., 4' to 12' long.
2—Crystallizers—10' long.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
1—Sparkler Stainless Filter Model 18-S-23.
1—Sparkler Stainless Filter Model 33-S-9.
6—Blackburn-Smith Jacketed Filters, 20 to 100 gpm.
1—Single Deck Vibrating Screen, 3'x6'.
1—Jeffrey Vibrating Conveyor, 15' long.
4—Hoffman Steam Jacketed Filters.
1—Meade Mill #2 with 7½ H.P. Motor.
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CARPENTER 20 S.S. HEAT EXCHANGERS — (2) 240-1"x8' tubes, STEEL SHELL, 500 SQ. FT.

BIRD CONT. CENTRIFUGE—36"x58" S.S. 304, COMPLETE.

NICKEL CLAD KETTLE, ASME JKTD. AGIT. 750 GALLON.

KETTLES, G/L, PFAUDLER, 200, 300, 500 & 1,000 GALLON.

BALL MILLS—25 to 1,000 gallon.
CENTRIFUGE—Troy, 17", monel.
CONDENSERS—8, all monel, 50 sq. ft. Shell & Tube. Expansion Joint.
DRYER, BUFFALO—Double Drum, 32" dia. x 90", reconditioned.
FILTER PRESSES—24", cast iron & heresite.
HEAT EXCHANGERS—188 sq. ft. S.S. 304 tubes, steel shell; 25 sq. ft. all S.S.
MIXERS—D. A. SIGMA, Jktd. Steel and S.S. 50, 60, & 200 gallon.
MIXERS—DRY POWDER, 400, 600, 1000, 1500, 2000, & 3000 lb.
ROTEX SIFTER—40"x84", 2 deck, 3 H.P.
TABLET PRESS—Stokes, RB1, complete.
TANKS—2, Steel, horizontal, 25,000 gallon; 10'6"x39', welded dished.

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AT&M Centrifuge, S S, 42" w 40 HP mtr.
Raymond 40 Imp Mill, S S, w 40 HP mtr.
347 S S Tank, 10½' x 21' 8" x ¼", 13,000 gals.
Roto Louvre S S Rotary Dryer, 4' x 30'
Hersey 4' x 30' S S Rotary Dryer, complete
Day 5 gal. S S jktd. vac. Mixer, sigma arms
Gen. American 42" x 120" twin drum dryer
Baker Perkins 100 gal. S S Mixer, 20 HP exp.

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Devine #12 & #23 Vac. Shelf Dryers.
Stokes 2'x6' Rotary Vac. Dryer.
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer. 24"x20"

CENTRIFUGALS AND CENTRIFUGES
4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

KETTLES AND TANKS
Pfaudler 500 gal. Glass Lined Jack Reactor.
Pfaudler 250 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack Cl Vac Kettle.
2—impreg. Units 30" & 36" dia. complete.
500 & 1,000 gal. closed Jack. Steel Kettles.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
2—Mikro Pulverizers #2TH & #2SI.
Abbe 37"x30" chrome-mang. Ball Mill.
Patterson Pebble Mills, 6'x8', 6'x5', 30"x42".
Abbe 30"x30", Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #0, 18" hinged Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
Buchanan 5"x12" Jaw Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

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Lancaster 6' dia. Vert. Mixer 25 HP.
Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Orv. Simpson 20"x48" Rotex Sifter
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

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Kux 2½" dia. Tablet Machine.
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1—Pfaudler 78" x 96" Vert. Glass lined 2300 gal.
2—1500 gal. 316 S/S 5' x 9' Vert. 20 PSI.
1—7500 gal. 316 S/S clad 12' x 6' x 5'6" cone.
1—750 gal. 316 S/S 5' x 5' cone bottom.
3—4' diam. 316 S/S Conical Hoppers.
2—3' x 32" 316 S/S Conical Hopers.
1—2' x 3' Horizontal Closed 316 S/S.
1—2½' x 3½' Horizontal Closed 316 S/S.
2—3' x 3½' Horizontal Closed Nickel Clad
2—7' x 11' Vert. Steel Brick & Lead lined.
1—7' x 7'4" Vert. Steel Brick & Lead lined 50 psi.
1—6' x 6' Vert. Steel Brick & Lead Lined.
1—4' x 5'6" Vert. Steel Brick & Lead lined, 50 psi.
4—4' x 8' Hor. Steel ASME 25 psi.
1—4' x 5'6" Hor. Steel ASME 25 psi.
2—3' x 7' Vert. Steel ASME 25 psi.

PUMPS—CENTRIFUGAL
1—Lawrence Vert. 316 S/S 70 gpm 157' hd 20 HP.
1—Lawrence Vert. 316 S/S 55 gpm 107' hd 7½ HP.
2—Lawrence Vert. 316 S/S 50 gpm 107' hd 5 HP.
3—Karbate Series 5A 60 gpm 60' hd 5 HP.
9—Karbate new impellers.
1—I.R. 1000 gpm Series 5CRVL 40 HP.
2—I.R. 1000 gpm Series 5CRVL 30 HP.
2—I.R. 650 gpm Series 5CRVL 30 HP.

CONVEYORS
3—Link Belt 316 S/S 18" x 12', 18" x 18' 18" x 7' twin screw.
1—Link Belt Steel 10" x 16' twin screw.
9—Link Belt 12" Troughing Belt Conveyors 15', 20', 30', 35', 45', 50' open and closed with drives and motors.

REACTOR—CONDENSERS
3—4' x 13' closed 316 S/S Reactors or Convertors with 109—3" x 6' 316 S/S tubes 150 psi.
1—Pfaudler 250 gal. Hastelloy C Reactor.
2—Pfaudler Monel Heat Exchanger 62 sq. ft.
9—Karbate Heat Exchangers 370, 188, 70, 16.4 sq. ft.

DRYERS
1—Buflovak 6'x5'6" Monel Drum Flakers NEW with drives and motors.
1—Rietz 30' "Thermoscrew" Conveyor Dryer 304 S/S NEW with drive & motor.

MISCELLANEOUS
1—I.R. Jet Refrigeration Unit complete 208 Tons 65.5° F. to 60° F.
1—I.R. Jet Refrigeration Unit complete 136 Tons 50° F. to 45° F.
1—Patterson 7'6" Conical Blender Rubber lined with drive & 15 HP motor.
2—Buffalo-Forge Fans 10,000 cfm at 7" S.P., 20 HP motor.
20—Link Belt Reducers and drives from ¾ HP to 15 HP.

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DRYERS
4—Link Belt Roto-Louvre 7'5"x20', 6'4"x24', 3'10"x12', 2'7"x10'.
2—Hersey 4'x30', 3'x20' S/S Hot Air Rotary.
2—Struthers-Wells 5'x15' nickel Rotary Vacuum.
2—Buflovak 32"x52" atmos. double drum 316 S/S.
1—Devine 2'x4' Vacuum Drum, 316 S/S.
1—Stokes 138H Vacuum Shelf with 10—44"x40" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac. 3'x15', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
6—Rotary Dryers 5'x30', 5'x40', 4½'x50', 6'x40', 7'x55'.

MIXERS
9—Day Cincinnatus double arm 660, 250, 150, 100 and 50 gals.
3—Baker Perkins 100, 50 gal. double arm, jacketed.
5—Sprout Waldron S/S jacketed, Powder, 67, 27 and 10 cu. ft.
1—Struthers-Wells 6'x9' S/S. Rotating, jacketed.
1—Patterson 6' dia. Steel Conical, with 7½ HP motor.

MILLS
1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
1—Patterson 3½'x4' jacketed, steel Ball Mill.
1—Mikro Pulverizer #4TH.

CENTRIFUGES
1—Sharples PN14 Super-D-Canter, 316 S/S.
2—Sharples C-20, C-27, Super-D-Hydrators, 316 S/S.
3—Sharples P16 Monel and S/S. Pressurtite Super Centrifuges.
4—Tolhurst AT&M 40", 36", 32", Suspended steel, stainless.
1—Bird 40" Suspended, rubber covered, imperforate basket, M.D.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Tolhurst 26" suspended, rubber covered, perforated basket, M.D.

REACTORS, CONDENSERS, TOWERS, TANKS
1—2500 gal. 316 S/S jacketed Reactor.
8—4000 gal. 7'x14' Steel jacketed, agitated Kettles with 10 HP Turbo Mixers.
4—3000, 6000, 7500, & 10,000 gal. S/S Tanks.
2—Aluminum 1400 & 5500 gal. Tanks.
2—Pfaudler 100 gal. glass lined, jacketed, agitated Reactors.
1—Buflovak 800 gal. 347 S/S jacketed, agitated Reactor.
2—S.W. 4½'x20', 7½'x40' S/S Reactors or Converters.
5—S/S Towers 7'x25'6", 4'x30', 12"x14'.
25—Atmospheric S/S Heat Exchangers 715 & 477 sq. ft.
22—55 to 2400 sq. ft. S/S & Admiralty Heat Exchangers.

FILTERS
2—Oliver 8'x10' Monel Rotary Vacuum.
1—Swenson 4'x2' Nickel Rotary Vacuum.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Niagara 110-20 Filter with 12 S/S leaves.
2—#3 Sweetland S/S Filters, 12-25" dia. leaves 75 sq. ft.
5—#3, #5, #7, #10, #12 Sweetland Filters.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS
1—Foster Wheeler Dowtherm Unit 4½ million BTU.
4—Orville Simpson Rotex Sifters 40"x120", 40"x84", 20"x81".
4—Robinson S/S Sifters 40"x60".
7—Stokes #DDS2 and "R" Tablet Presses.
2—Ball & Jewell #1½ Rotary Cutters.
7—Nash vacuum Pumps #H7, #H6, #L5, #L3, #4, #2.
2—Beechruss Model D Vacuum Pumps 50 cfm.
7—Durco S/S Centrifugal Pumps 1" to 3".

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RECENT PURCHASES

4—Sprout Waldron Ribbon Mixers, 336 cu. ft. (12,000#).

1—Ing. Rand Centrifugal Pump #10 — ALV, 300 GPM—200'. UNUSED.

2—Stainless Steel Tanks, 4' D x 16' x ¼".

1—Hardinge 6' D x 22" Conical Ball Mill, Steel.

1—Ruggles Coles SC-2 Rotary Steam Tube Dryer.

1—Sturtevant 8 x 10 Jaw Crusher.

1—Niagara #110-20 Stainless Steel Filter, 110 sq. ft.

2—14,000 gal. A. O. Smith Glass Lined Tanks.

2—Patt-Kelley St. St. Twin Shell Blenders, 5 & 10 cu. ft.

1—Bowen St. St. Spray Dryer, 5' dia.

2—W & P 100 gal. Sigma Blade Jacketed Mixers.

2—Oliver 5'3" dia. x 8' face Continuous panel type Filters, vapor tight hoods.

1—Patterson 6'D x 8'L "DJ" Jacketed Steel Ball Mill, 40 HP Expl. Pr. Motor. Unused.

1—Stokes 150 gal. St. St. Jktd. Vacuum Still.

1—500 gal. T316 St. St. Evaporator, with 145 sq. ft. coil.

1—Buflovak #6.5 Double Effect Stainless Steel Evaporator, 588 sq. ft.

1—Rogers 48" dia. St. St. Sanitary Vacuum Pan.

1—Goslin-Birmingham Quadruple Effect vertical long tube Evaporator, total 6965 sq. ft. copper tubes.

1—Conkey Triple Effect vertical long tube Evaporator, total 1900 sq. ft. copper tubes. UNUSED.

2—Blaw-Knox ½ gal. Stainless Steel Autoclaves, 2000# Pr., agit.

1—Sharples 16P Pressurtite Centrifuge, St. St. Unused.

1—Lee 80 gal. St. St. Steam Jktd Kettle with double Motion Agitator.

1—Hope St. St. Single Piston Filler, type 18.

IN STOCK
STAINLESS STEEL TANKS

1—10500 gal. Horiz. T304—NEW.

1—6500 gal. Vert. Clad—Used.

1—4200 gal. T316, 6' x 20' x 5/16", heat treated.

1—2500 gal. Glascote T304 St. St. Milk Tank.

1—2000 gal. T347 Vacuum Receiver with 15# jkt.

40—From 15 gal. to 1000 gal.

1—T316 Bin or Hopper, 6'9" x 6'9"x10' O.A.H., 275 cu. ft.

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Complete Crystallizing & Filtering Unit installed 1951, used on Epsom Salts; capacity 1670 lbs. crystals per hr.
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Feinc 6' dia. Horiz. Filter S/S and Steel Construction.
Shriver 30" plate & frame Filter Press.
2100 gal. S/S Horiz. Tank; Pumps; Tanks; Kettles.

All units in very good condition.

1—Blaw Knox 110 gal. Autoclave 2000 psi & jacketed.
1—Davis Inconel Heat Exch. 195 sq. ft.
6—Surface Condensers & Receivers 100 to 175 sq. ft.
1—Carrier 8 Truck Dryer.
4—Devine Double Dr. Vac. Shelf Dryers, 17 & 20 shelves 59" x 78".
1—Double Drum Dryer 4' x 9'.
8—C.I. Filter Presses, 12" - 30".
2—Sweetland Filters No. 10 & No. 12
1——Glasscote 750 gal. G.L. Kettle, coded for 75# Jack. pressure.
2—Pfaudler Reactors, 100 & 500 gal. G.L.

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1800 CFM 100 PSI 300 HP Bury.
327 CFM 100 PSI 60 HP, I.R. Imperial X.
215 CFM 75 PSI 30 HP, I.R.
30 CFM 30 PSI Fuller C11.

CENTRIFUGES
Sharples Super Centrifuge.
Sharples C20, SS, Super-D-Hydrator.
Sharples C27, SS, Super-D-Hydrator.
Sharples PN14, SS, Super-D-Canter.

TOWERS
SS 18-8 Scrubber, 12"x15'.
SS 347 lined, Scrubber, 5'x18'.
6'x29' 21 trays, Stainless.
5'x24' 24 trays, Everdur.
7'x54' 20 trays, 150 PSI.
6'6"x40' 16 trays, 80 PSI.
3'x44' 18 trays, 300 PSI.
Karbate #22, packed, 19"x12' NEW.
4'x59' 23 trays, 160 PSI.
7'6"x41'7" Reactor, 160 PSI.
4'6"x40' 13 trays, 180 PSI.
2'x47' 20 trays, 200 PSI.
2'x47' 20 trays, 375 PSI.
3'x49' 28 trays, 425 PSI.
2'x37' 16 trays, 250 PSI.
5'x36' Scrubber, 240 PSI.

BOILERS
3—Kawanee Firebox Boilers, 304 HP, 125 PSI WP, Series 500, Model 590, ASME & Natl. Board stamped, New 1942.

MIXERS
100 gal. Readco, jktd. dbl. sigma blades.
170 gal. Ajax dbl. arm, power pump.
1050 gal. Paddle dbl. shaft heavy duty.
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29 cu. ft. Patterson Conical Blender.
67-27-10 cu. ft. SS Sprout Waldron Powder.
550 cu. ft. SS. jktd. rotating oscillating.

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Roto-Louvre 705-20 SS heating coils comp.
Roto-Louvre 604-24 complete w/furnace.
Roto-Louvre 502-20 comp. w/furnace.
Roto-Louvre 310-12 heating coils, comp.
Rotary Vac. 5'x15' nickel clad.
Rotary Vac. 30"x8', Stokes 59AB.
Rotary 26"x8' oil fired with feeder.
Rotary 4'x27' oil fired, motor drive.
Rotary 5'x67' 6" lifters.
Rotary SS, 4'x30' complete.
Rotary Kiln 8'x125'x¾" firing hood.
Rotary Kiln 10'x200'x¾" oil & gas burners, comb. chamber, dust collecting system.
SS Spray, 10'x36', gas fired.

MILLS
Raymond #1 Automatic.
10'x48" Hardinge Ball Mill.
Raymond #40 Imp. Stainless.
5'x8' Kennedy Type M, w/disc feeder.
6'x8' Abbe & Patterson.

HEAT EXCHANGERS
Steel Tubes, 94 to 550 sq. ft. (5).
Adm. Tubes, 140 to 440 sq. ft. (7).
100 sq. ft. SS 40# shell 60# tubes.
198 sq. ft. steel 325# Adm. tubes 125#.
252 sq. ft. steel 400# shell 150# tubes.
415 sq. ft. steel shell 125# Adm. tubes 80#.
550 sq. ft. steel 325# shell 160# tubes.
1035 sq ft. steel 250# shell & tubes.
1800 sq. ft. steel shell Everdur tubes.
3300 sq. ft. steel 150# shell & tubes.

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PUMP—6000 GPM Peerless Deep Well 80' head NEW.
EXTRUDER—Stainless Steel Screw 2½",
CENT. SEPARATORS—8', 5', 18".
GYRO SIFTER—72 sq. ft. 2-screen Robinson 28A.
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1 Gal. Steel Autoclave 800 PSI; gas Fired; agitated ¾ HP XPL.

Struthers Wells Vulcanizer; 5'x20'; 150 PSI-ASME; qu. opening door.

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Hor. Steel Autoclave; 66"x14'7"; with tracks; door each end.

950 Gal. Steel Reactor; coil heated and agitated; dimensions 5'x5'6".

Bethlehem Sulphonating Pot; 1,400 gal. capacity; with coils cast in jacket wall.

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NEW Steel and Stainless Steel Ribbon Mixers from 400 lb. to 10,000 lb.

Porter Type 316 Stainless Mixer; 30"x36"x57"; center discharge.

Lancaster Mix Mullers, complete with accessories; several sizes.

Stainless Tumbling Mixer; 5'x3' with 3 Stand & 3 HP motor.

Sprout Waldron Stainless Continuous Cylindrical Ribbon Mixer; 28"x12'.

W&P Type Double Arm Heavy Duty Jacketed Mixers; 100 gal. & 200 gal.

CENTRIFUGALS

Baker Perkins Termeer Centrifuge in Type 316 SS; Model S12; 7½ HP motor.

Bird Continuous Centrifuge; 18"x28" with solid conical bowl.

Bird 48" Rubber Cov. Suspended Type Centrifuge with plow and fume housing.

Tolhurst Overdriven Rubber covered Centrifuge; 48"; perforate basket.

DeLaval Industrial Centrifugals; Model AA-00 with 3 HP XPL motors.

DRYERS-EVAPORATORS

Hersey Rotary Gas Fired Counter Current Dryer; with flights; 5' diameter x 26' long.

Stokes Rotary Jacketed Dryers; 18"x8" and 34"x10' (Vacuum).

Steel Crystallizers; Jacketed and Agitated (5 HP) 12' long; 24" wide; 21" deep.

Louisville Rotary Steam Tube Dryers; sizes up to 54"x40'; complete.

Inconel Double Effect Evaporator; 850 sq. ft. and 430 sq. ft. Complete.

Struthers Wells S.S. Batch Evaporator, 630 sq. ft. Stainless Tubes 2" diameter.

Combustion Engineering 2 Stage Flash Drying System; 1,000 pounds of evaporation per hour.

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Shriver & Sperry Pl. & Fr. Presses in Iron, Wood, Alum. Nickel, etc.

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Oliver Sweetland Filters from No. 2 to No. 12; wide choice.

Bird Young Rotary Vacuum Filter; 4'x4'; with Stainless Screens.

Hor. Stainless Rot. Vac. Filter; 7' Diameter with cone drive.

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Mikro Pulverizers up to No. 4.

Williams Hammer Mills; in sizes up to 42"x48".

Fitzpatrick Stainless Comminutators.

Abbe, Patterson and International Pebble Mills up to 8'x8' with 50 HP.

Raymond SS Imp Mill with 50 HP motor.

Bauer Double Runner 24" Attrition Mill.

Hardinge Conical Ball Mill; 10'x48".

HEAT EXCHANGERS

Whitlock SS Heat Exchanger; 250 sq. ft.; 2 pass-tube side.

Stainless Heat Exchanger or Condenser; 185 sq. ft.; 300 Tubes.

Vertical Stainless Condenser; 220 sq. ft.; 231 Tubes.

Horizontal 2 Pass Floating Hd. Heat Exchanger; 500 sq. ft.

Stainless Steel Calandria Section; 300 stainless Steel ¾" Tubes; 38" long in S.S. Tube sheets; 185 sq. ft.

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Stainless 16 section Column; 19' overall x 8⅝"; with Condenser, Decanter, Feed Tank and Accessories.

Aluminum 11 section Column; 36' overall; 27½" diameter; complete with Calandria, Deplegmator, etc.

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Steel Still 54"x96" with steam coils and Receiver 54"x96" with manhole.

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Struthers Wells Stainless Vac. Pans; 5'x12'8" with Calandria 630 sq. ft.

Glass Lined Reactors by Pfaudler and Glasscote; 25 gal. to 1,000 gal., some jacketed and agitated.

Lancaster SS Lined Rotary Reactor; Jktd; 50"x 17'4"; 300 PSI internal.

Monel Reactor; 785 Gal.; 8'x5'; Jacketed and agitated.

Dopp 650 Gal. Cast Iron; Jacketed Agitated; 80"x67".

Mojonnier Stainless Steel Vacuum Pan; 3'x10' with Stainless Calandria and Downcomer.

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1—Stainless Steel 300 gal. jkt'd Reactor.

5—Baker Perkins 1000 gal. Jkt'd Double Arm Mixer.

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9—Stainless Steel Heat Exchangers 15 to 100 sq. ft.

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1—Stainless Steel 4000 gallons Storage Tank.

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3—J. H. Day Brighton Mixers, 175 gallons.

4—Baker Perkins Double Arm Jacketed Mixers, 100 gallons, Sigma Blades.

1—Banbury Midget Size Mixer.

1—Buflovak Double Drum Dryer, 32" x 90 in., complete.

1—Pfaudler Glass-lined Rotary Dryer, 4 ft. x 45 ft.

1—Swenson Walker Stainless Steel Jkt'd Crystallizers 20 ft. Long.

2—2500 gal. Steel Pressure Tanks w/coil agitator.

1—Stokes Rotary Vacuum Dryer, 30 in. x 8 ft.

1—J. P. Devine Rotary Vacuum Dryer, 5 ft. x 25 ft.

3—Mixing Equip. 3000 gal. Steel Jkt'd Turbo Agitated Kettles.

3—Buflovak Single Door Vacuum Shelf Dryers, 20 shelves.

1—J. H. Day Stainless Steel 200 gal. jkt'd Double Arm Sigma Blade Mixer.

3—Stainless Steel Jacketed Kettles, 380 gallons each.

1—Oliver Rubber-lined Vacuum Filter, 3 ft. x 6 ft.

1—Shriver 42" x 42" Cast Iron Plate and Frame Filter Press, 60 chambers.

1—Stainless Steel 250 gal. Jkt'd Kettle.

1—Sperry 36" x 36" Plate and Frame, Cast Iron, Frame Press, 40 chambers.

1—Bird Suspended Type Centrifuge, 48" Basket with Plow and motor, basket perforated.

2—6' x 40' Rotary Dryers ½" Shell.

3—A. O. Smith Stainless Steel Heat Exchangers, 1500 sq. ft. each.

1—650 gal. Steel Jktd. Pressure Kettle w/Turbo Agitator.

1—Stokes Model "R" Tablet Press.

5—Cyclotherm C-90 Package Boilers 125 psi capacity 3000 lbs. Steam per hr.

5—2500 gal. Jacketed Steel Reactors.

1—Blaw Knox 500 gal. Steel jtk'd Autoclave W.P. 300 psi Int., 150 psi jkt. ASME.

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2—8'x125' Rotary Kilns.
3—Buflovac 42x120, 32x120 Atmos dbl. Drum Dryers, complete: 1—American 24x36.
2—54"x70" and 1—40"x60" Bird Continuous Centrifugals, S S Solid bowls.

1—Day #30 Imperial jack. Mixer, 75 gal.
1—Buflovac 48"x40" Drum Flaker, chrome plated, s/s ends.
9—Sperry 18"x18" Filter Presses, 11 ch.
1—Link-Belt Co. ROTARY DRYER, Roto-Louvre, #502-16 Type C, 5'2" dia. 16' long with #304 S/S contact parts.
3—Unused #12 Sweetland FILTERS, 48 bronze monel covered bottom drainage leaves 3" c/c. Latest type; 1—#2, 23 copper leaves 1½" cc.
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2—Patterson style D 100 gallon porcelain lined pebble mills.
1—Unused Shriver 30" cast iron filter press, 20 chambers.
1—Hersey 3'x24' all monel rotary dryer.

3—Mikro #1 and #2 pulverizers.
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3—Pfaudler 500 gallon glass lined, jacketed and agitated reactors.
2—International & Patterson 5' and 4' conical blenders, 1 stainless steel.
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Copper, Aluminum and S. S. Jacketed Mixing Kettles.
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8x150 lb. lpks. Dupont Bon Maroon LTRT 533-D	2.25/lb.	1.60/lb.
1x225 lb. bbl. A/S Rangoon Maroon 24-5513	1.75/lb.	.95/lb.
5x200 lb. lpks. CK Williams Pure Chr. Hydroxide	1.05/lb.	.80/lb.
2x200 lb. dr. Alcoa 1578XF Alum. Lining Paste	.70/lb.	.55/lb.
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Oils, Fats and Waxes

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at 15c. per pound, drums. Oleo stearine sales took place at 11½c. per pound, barrels, with some sellers holding at ¼c. more.

Tallow—Reduced demand brought out increased offers and moderate volume of business was reported at ⅛c. lower, chiefly for domestic delivery, soapers participating. Export interest was slow, which helped to depress the market. Bleachable fancy was sold at 8⅜c. per pound, tankcars, delivered. Extra was quoted at 8⅛c.; special, 7⅞c. and No 1, 7½c. Edible was unchanged at 10c., same basis. Fancy guaranteed was sold at 9¾c. drums, f.a.s., and available later at ⅛c. less.

Fish Oils

Cod—Trading was reported at a standstill. Offers for shipment were nil, with buyers also showing little interest, preferring to await developments in the current production. Stocks on spot were scarce and quoted nominally at 11c. per pound, drums, exwarehouse.

Refined Fish—Scarcity of crude menhaden oil continued to feature this market. Export inquiry was quite active, but with offers scarce, the market was merely nominal at 8¾c. per pound, tankcars, works, Atlantic coast and 9⅛c, f.a.s. Gulf ports. Refined grades were in good request and firm at the recent advance. Light pressed was quoted at 10.3c. per pound, tankcars, New York basis.

Los Angeles.—The local market continued firm with limited supplies due to strike conditions. There were no offerings of crude tuna oil reported, with last sales at 6c. per pound, tankcar cases, f.o.b. San Pedro. With sardine fishing still not underway since start of the Southern California season, October 1, last sales were reported at 8¼c. per pound, with sellers ideas now at the 9c. level. Canadian herring oil traded for export, 9c. per pound, f.o.b. Vancouver, Canadian Funds.

Cake and Meal

Cottonseed Meal—Domestic inquiry for meal was slow and exporters are showing less interest than a week ago. Prices have shown some signs of easing, although most mills seem to be in a fairly comfortable position on shipments. Seed continued to move to the mills in a fairly orderly manner, although scattered rains throughout the southeast have slowed the seed movement to some extent. Meal, forty-one percent, was offered at $57. per ton Memphis; $54.50 Alabama; $56. Georgia; $57. Carolina mills for October shipment.

Linseed Meal—Market was firm and higher. Demand active for nearby delivery.

Minneapolis.—There was a good demand for nearby delivery linseed meal and prices held firm. Extracted meal, 36 percent protein, was quoted at $61.50 to $62 a ton, bulk, in carlots, f.o.b., Minneapolis, for balance of 1955. Expeller meal was priced out of first hands at $61 a ton for January and $60 for February-June shipment. Shipments were exceedingly heavy.

Shipments of linseed meal, in pounds, were as follows:—

	1955-56	1954-55
Past week	19,980,000	16,200,000
Since Sept. 1	91,620,000	70,920,000

Soybean Meal—Private estimates put this year's soybean crop at around 368,000,000 bushels, which is lower than the September 1 government estimate. Supplies were fairly tight for nearby shipment although prices have dropped off from the recent highs. Beans are moving in fairly good volume. Demand for meal was chiefly for nearby shipment but there is good inquiry for forward shipments at below present asking prices. Meal, forty-four percent, unrestricted was quoted at $59. October, $55. November forward, Decatur, and $58. f.o.b. Mississippi Valley for October shipment.

Waxes

Beeswax—This market continued steady, due to the scarcity of crude grades. Demand for refined grades were light and spotty, but all grades were well held at former levels.

Carnauba—Business was restricted to actual needs. Stocks on spot were ample and quotably unchanged except, No 3 Ceara crude which was lower at 55c. to 57c. per pound, spot as to quantity. Yellow grades were in limited supply and firmly held. Offers from Brazil were also light, and maintained at former levels.

Tung Oil Curbs

—Continued from page 3

general sales manager of the Commodity Stabilization Service.

No Change in CCC Policies

The industry representatives gained the impression from the discussions that no important changes in policies was contemplated and that there was no likelihood that the CCC would dump its tung oil holdings on the market nor would it let the prices of the government-owned oil get too high. Producers were said to fear that excessively high prices for tung oil might encourage substitutions and in the long run be harmful to them.

Concern had been expressed in some quarters that the government might dump its oil on the market. This came about because the amounts being offered for sale weekly have gradually been increased until now they run to forty cars a week. It was not disclosed whether this amount will be increased or reduced in the future. Although the agency has been making offers in considerable quantities, it has been accepting only a few bids. Most of the bids have been turned down because the prices offered are regarded as too high.

Statement of the ownership management, circulation, etc., required by the Acts of Congress of August 24, 1912, and March 3, 1933, and July 2, 1946, of Oil, Paint and Drug Reporter, published weekly at New York, N. Y., for October 1, 1955.

The names and addresses of the publisher, editor, managing editor, and business manager are:—Publisher, Schnell Publishing Company, Inc., 30 Church street, New York; editor, William S. Auchincloss, 30 Church street, New York, managing editor, Arthur R. Kavaler, 30 Church street, New York; business manager, William S. Auchincloss, 30 Church street, New York. That the owner is Schnell Publishing Company, Inc., 30 Church street, New York. Stockholders holding 1 percent or more, James Stuart Auchincloss, Short Hills, N. J., Jean Schnell Auchincloss, Short Hills, N. J. That the known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities are:—Not any. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner.

That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above was 10,336.

(Signed) William S. Auchincloss, Business Manager.

Sworn to and subscribed before me this 15th day of September, 1955.

(Signed) Eleanor H. Buxbaum, Notary Public.

[My commission expires March 30, 1957.]

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Mica Paint Formulation Described

The Wet Ground Mica Association, New York, has published its bulletin No. 21, describing an opaque window paint based on the lightscattering effect of wet ground mica. The bulletin gives the formulation of the paint and technical data related to it.

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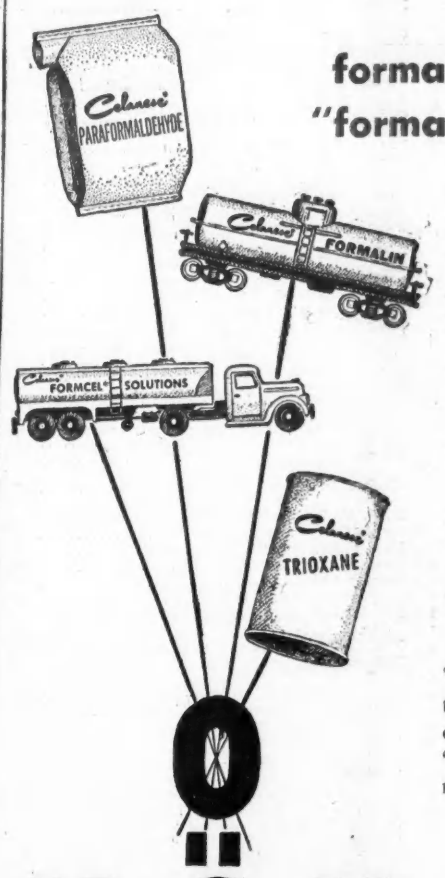

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